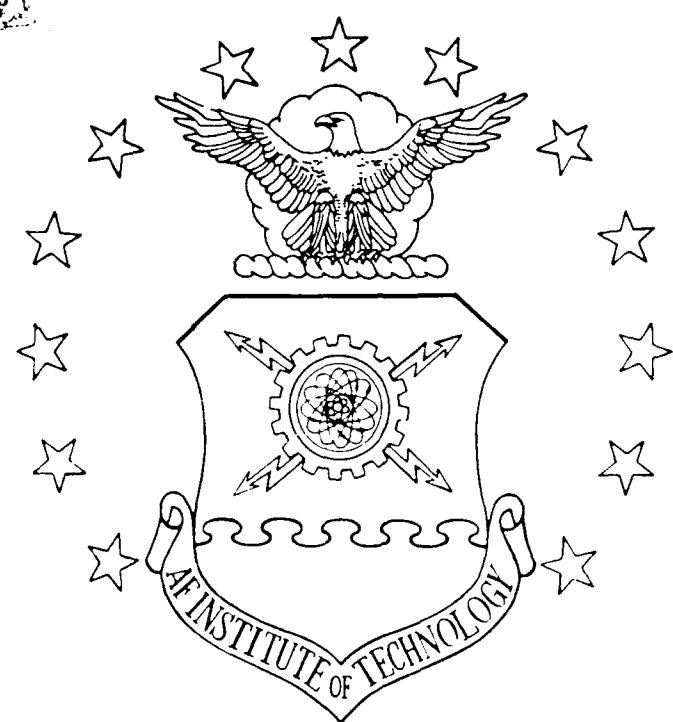


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EXPERT OPINION ON ELEMENTS REQUIRED  
TO DEVELOP A BASE SUPPORT PLAN  
TRAINING GUIDE

THESIS

Mark S. Talley  
Captain, USAF

AFIT/GLM/LSM/89S-65

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EXPERT OPINION ON ELEMENTS REQUIRED TO  
DEVELOP A BASE SUPPORT PLAN TRAINING GUIDE

THESIS

Presented to the Faculty of the School of Logistics  
of the Air Force Institute of Technology  
Air University  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Logistics Management

Mark S. Talley, B.S.  
Captain, USAF

September 1989

Approved for public release; distribution unlimited

## Preface

The purpose of this study was to identify and define critical elements involved in base support planning for use in a training guide. Further, a format for this training guide was also identified.

A Delphi survey of 15 base support plan experts was conducted to achieved the purposes of this study. Areas such as extracting data from source documents, lack of training of functional area representatives, and force integration were deemed critical and important by the experts. The experts agreed a combination "how to" manual and computer aided instruction program would be the best format for presenting base support plan training. This study should continue with the actual development of the manual and computer program using the information gathered in this study as a baseline.

Conducting this research involved the invaluable contributions of many people. I wish to thank my thesis advisor, Mr. Terrence Berle, for his guidance and many helpful suggestions. I also wish to thank Lt Col Fred Westfall and Lt Col Walter Campbell for their assistance during this study. My Appreciation goes out to all the individuals that took time out to participate in this study. Finally, I wish to thank my wonderful wife Beth, for her patience, suggestions, encouragement, and love.

Mark S. Talley

## Table of Contents

	Page
Preface . . . . .	11
List of Tables . . . . .	v
Abstract . . . . .	vi
I. Introduction . . . . .	1
General Issue . . . . .	1
Problem Statement . . . . .	2
Research Objectives . . . . .	3
Research Questions . . . . .	3
Background . . . . .	4
Scope of Research . . . . .	6
Definitions . . . . .	6
Summary . . . . .	8
II. Literature Review . . . . .	9
Planning . . . . .	9
Civilian Planning . . . . .	9
Military Planning . . . . .	10
Base Support Planning . . . . .	12
Base Support Plan Training . . . . .	16
Training . . . . .	16
Air Force Plans Training . . . . .	17
Summary . . . . .	18
III. Methodology . . . . .	20
Phase I . . . . .	20
Phase II . . . . .	21
Delphi Method . . . . .	22
Selection of Delphi Experts . . . . .	24
Delphi Survey One . . . . .	25
Delphi Survey Two . . . . .	26
Decision Rule . . . . .	28
Summary . . . . .	29
IV. Findings and Analysis . . . . .	30
Introduction . . . . .	30
Delphi Survey . . . . .	30
Round One Results . . . . .	31
Topic 2 . . . . .	33
Question A . . . . .	33
Question B . . . . .	34
Question C . . . . .	34

	Page
Question D . . . . .	35
Question E . . . . .	36
Question F . . . . .	37
Question G . . . . .	37
Question H . . . . .	38
Topic 3 . . . . .	38
Other Comments . . . . .	40
Round Two Delphi Survey . . . . .	40
Topic 2 . . . . .	41
Question A . . . . .	41
Question B . . . . .	42
Question C . . . . .	44
Question D . . . . .	46
Question E . . . . .	48
Question F . . . . .	49
Question G . . . . .	50
Question H . . . . .	51
Topic 3 . . . . .	52
Question B . . . . .	54
Summary . . . . .	56
V. Conclusions and Recommendations . . . . .	57
Conclusions . . . . .	59
Research Question One . . . . .	59
Research Question Two . . . . .	60
Research Question Three . . . . .	61
Research Question Four . . . . .	63
Research Question Five . . . . .	64
Recommendations . . . . .	65
Recommendation One . . . . .	65
Recommendation Two . . . . .	66
Summary . . . . .	67
Appendix A: Round One Delphi Survey . . . . .	69
Appendix B: Delphi Round One Comments . . . . .	79
Appendix C: Round Two Delphi Survey . . . . .	94
Appendix D: Delphi Round Two Comments . . . . .	107
Appendix E: Example Base Support Plan Annexes . . . . .	112
Bibliography . . . . .	113
Vita . . . . .	115

### List of Tables

Table	Page
1. Demographic Responses -- Round One Delphi Survey . . . . .	32
2. Question A; Most Critical or Important Elements -- Round Two Delphi Survey . . . . .	42
3. Question B; Most Difficult BSP Aspects -- Round Two Delphi Survey . . . . .	44
4. Question C; Causes of the Most Difficult BSP Aspects -- Round Two Delphi Survey . . . . .	45
5. Question D; Does AFR 28-31 Alleviate BSP Difficulties -- Round Two Delphi Survey . . . . .	47
6. Question F; Difficulties With Functional Area Representatives -- Round Two Delphi Survey . . . . .	49
7. Question G; Verifying Information Accuracy -- Round Two Delphi Survey . . . . .	50
8. Question A; Training Methods -- Round Two Delphi Survey . . . . .	53
9. Question B; Formats for a BSP Training Guide -- Round Two Delphi Survey . . . . .	54



Abstract

The purpose of this study was to identify and define critical elements involved in base support planning for use in a base support plan training guide. Additionally, a format for this guide was determined. Current issues involved in base support planning were determined through a literature review. These issues were used in the development of a Delphi survey.

A Delphi survey was developed to determine the most critical and important aspects of base support planning, and a format for a base support plan training guide. This Delphi survey was sent to a panel of 15 personnel whose current assignment involved some aspect of base support planning.

This study found the respondents did not have one main method for presenting base support plan training. However, the respondents did agree some formal type of training was needed. They did suggest a training manual as well as computer training program would help train novice base support planners.

The respondents agreed that interpreting source planning documents was critical to base support planning. Issues such as integration of effort, total force capability, flexibility, and force reception, beddown, and transition are the most important aspects of a base support

plan. Although the logistics planners usually assemble the plan, this study determined the functional area representatives should be emphasised in a training guide.

# EXPERT OPINION ON ELEMENTS REQUIRED TO DEVELOP A BASE SUPPORT PLAN TRAINING GUIDE

## I. Introduction

### General Issue

One of the primary functions of an Air Force logistics planner is to prepare support for a military conflict. This preparation is conducted through the development of planning documents. Air Force planning documents "help ensure coordinated and coherent effort toward achieving Air Force objectives (7:17). One of these documents, the base support plan, is an Air Force installation's plan for reception and deployment of military forces during war or contingencies (8:9).

Air Force Regulation 28-31, published December 1988, was created to provide direction in the development of base support plans. Prior to publication of this regulation, procedures for the base support planning functions were left to the major commands. No single set of procedures or requirements that standardized plans at deployment and reception bases were available. However, this new regulation is "written from a tell them what to do, not how to do it perspective" (16:11). The lack of "how to" guidance can create inconsistency and significant

differences in quality and usefulness of plans from base to base.

#### Problem Statement

An Air Force Logistics Management Center (AFLMC) research report by Captain Robert L. Fuller, dated July 1988, concluded: Air Force Regulation 28-31 would improve the "overall standard of base support/reception planning throughout the Air Force" (16:11). However, this study points out that over half of the current logistics planners are inexperienced in base support planning (16:3). This inexperience, and a need for standardization, dictated the need for definitive guidance for the development of base support plans (16:3). Further, there was no Air Force Regulation to provide a standard method of preparing and maintaining base support plans. AFR 28-31 addresses the specific requirements of the base support plan, and provides the minimum needed for standardization of BSP content for Air Force units. However, the regulation does not explain how to develop this plan. Inexperience and lack of "how to" guidance can result in inconsistent planning. The Logistics Management Center's report concluded that a training guide was needed to assist base level planners in developing base support plans (16:12).

### Research Objectives

To determine the content required in a base support plan training guide, the following research objectives were developed:

1. Determine the most critical elements involved in base support planning to ensure consistency and usefulness.
2. Identify planning factors that are the most difficult to understand and require further definition and explanation.
3. Determine an appropriate methodology and format for a base support plan training guide.

### Research Questions

To meet the objectives of this study, the following investigative questions were developed:

1. What are the critical elements involved in base support planning?
2. What areas in AR 28-31 seem ambiguous and/or hard to follow?
3. What are the common difficulties in developing a base support plan?
4. What, if any, are the prime difficulties in interpreting operation plans and extracting pertinent and consistent data for inclusion in base support plans?
5. What is the most useful method of presenting a base support plan training guide?

## Background

During a military mobilization in response to a war or contingency, thousands of military personnel and thousands of tons of equipment will be moved to, through, and/or from, military installations throughout the world. Planning for these situations is accomplished through the development of operation plans (OPlans). OPlans contain lists of personnel and equipment and describe what base they are from and where and when they will deploy (7;8). The base support plan allows an individual installation to plan for this influx of personnel and equipment.

Development of the base support plan requires the base level logistics planner to analyze Joint Chiefs of Staff, Commander's in Chief, and component command's operation plans to assess the demands made on the base by the received forces (8). Another key aspect to the base support plan is dealing with other military services. During a war or contingency other services, such as the Army or Marines, will utilize Air Force installations. This means a base support planner must obtain information on multi-service use of the installation.

The AFLMC report noted that many base level planners had difficulty extracting information from operation plans (16:7). Other difficulties exist in receiving the required plans. Multiple service planning information is difficult to obtain because it is not automatically sent to the bases.

An added difficulty is this information is contained in multiple operations plans and is not consolidated or integrated. Therefore, this information is difficult to extract and validate. The AFLMC report further noted that 61 percent of base level planners had three or less years of experience in logistics planning (16:2).

The base support plan receives less attention than mobility (deployment) plans. Most Air Force installations must practice mobility two or more times a year. Further, when a base is inspected by their headquarters, the deployment posture of the base receives the majority of attention. The mobility plans are occasionally tested through exercises and they are constantly reviewed at base level as well as higher headquarters. The base support plan is seldom, if ever, exercised.

Headquarters, United States Air Force, published Air Force Regulation 28-31 in December 1988 to provide guidance for base support planning. This regulation describes the content and format of a base support plan. However, according to the AFLMC report, this regulation does not explain how to develop this plan (16:11). The AFLMC report was completed in July 1988 while AFR 28-31 was still in draft form. Due to this time gap, an additional review of AFR 28-31 was needed to determine if a training guide was still needed.

This researcher reviewed the new regulation and did find it lacking in the ability to explain how to develop a base support plan. The Air Force Logistics Management Center concurred with this finding. The AFLMC recommended the development of a training guide to assist base level logistics planners in developing base support plans (3:11-12).

#### Scope of Research

The goal of this study is to identify and define critical elements involved in base support planning. However, it is primarily for personnel in the multiple base functions who must prepare the detailed information that is consolidated into the installation plan. For this reason, planners in operations plans, transportation, supply and maintenance as well as logistics plans were contacted to provide responses. Further, the study will identify a methodology and format for presentation of the BSP information in a training guide. The information gathered in this research is beneficial for the logistics planners who direct the preparation and maintenance of the base support plan.

#### Definitions

The following key terms are defined:

1. Base Support Plan (BSP): An Air Force installation's plan to support command wartime operation



plans to describe an installation's mission, limitations, capabilities, and requirements to plan for resources and actions (8:8;15).

2. Base Support Planning Committee (BSPC): A body of wide ranging functional areas involved in the development of the base support plan. Their responsibilities include the collection of BSP data and review of the BSP. The BSPC is used to integrate the cross-functional base support areas and achieve coordination in the BSP process. (8:15)

3. Functional Area Representatives: Personnel from each function (Host and Tenant Units) on an Air Force installation that have responsibilities in development of the BSP. These representatives are appointed by their commanders to assist in developing the BSP (8:15).

4. Limiting Factor: A shortfall that could prevent performing a required mission (7:15)

5. Operation Plan: Any plan developed for carrying out military operations in a hostile environment (7:457).

6. Shortfall: The lack of personnel or equipment that would adversely impact an organizations mission. A shortfall is not as severe as a limiting factor. (8:15)

7. Time Phased Force and Deployment Data (TPFDD): "The computer-supported data base portion of an operational plan. The TPFDD contains time-phased force data, nonunit related cargo and personnel data, and movement data for the operation plan". (7:457)

8. Wartime Aircraft Activity Report (WAAR): This reports reflects planned utilization of military aircraft during a war or conflict (7:20-21).

#### Summary

This chapter described the current difficulties with base support planning. While the United States Air Force has published a regulation establishing the requirements for a base support plan, it is "what to do" not "how to do" direction. As a solution to these difficulties, a previous research study recommended the development of a training guide. In this research, three research objectives were developed to provide the appropriate content of a base support plan training guide.

The following chapters explain the content required in a base support plan training guide. In Chapter II, an overview of the principal regulations and literature pertaining to base support planning and training is presented. Chapter III identifies and describes the methodology used to achieve the research objectives. In Chapter IV, the results of this research effort are presented and analyzed. Chapter V summarizes answers to the research questions and presents recommendations for future action.

## II. Literature Review

This literature review is designed to give the reader an overview of the major works relating to this research. This review first examines documents pertaining to planning. A review of Air Force Regulation 28-3 is also conducted. Next, Air Force Regulation 28-31, Base Support Planning, is reviewed to reveal the composition of a base support plan. Finally, the need for base support plan training and elements involved in training is explained.

### Planning

Civilian Planning. A search of civilian literature on planning was conducted finding few sources relating to this research. Civilian planning literature primarily concentrates on business strategic planning. However, a book by Darryl Ellis and Peter Pekar does elaborate on some of the benefits of planning. They mention planning encourages "systematic thinking ahead" (13:23). This relates to identifying the specific steps required to perform a future function. Further mentioned is planning "...leads to a better coordination...of efforts" (13:23). For the Air Force this would correspond with integrating effort between the various commands as well as the other military services. The key benefit of any planning is a "...better preparedness for sudden new developments (13:23).

Military Planning. Generally, planning is the process of preparing for a future event by identifying the elements of that event and functions necessary for its completion. Air Force operational planning is the same in that planning is accomplished to prepare for a future war or contingency. Air Force operational planning begins with a three phased approach called the Planning Programming and Budgeting System (PPBS) (7:13). During execution of the PPBS:

...DOD personnel develop a military strategy to attain national military objectives, identify force levels sufficient to execute the approved military strategy, and develop a time-phased program to procure forces with available resources (7:13).

The PPBS requires the efforts of the Office of Secretary of Defense, the Joint Chiefs of Staff, the Defense Resources Board, and staffs from each of the services (7:13-14). The PPBS helps to produce a Department of Defense budget as well as a baseline for military planning.

A key planning document used by the PPBS is the Joint Strategic Planning Document (JSPD) (22:104-107). This document identifies potential threats and national security objectives for the United States (7:13). Information presented in the JSPD is used to develop other documents that assess our national security and identify ways of insuring this security (22:104-107). A key document that is derived from and supports the JSPD for operational and logistic planning factors is the War and Mobilization Plan (7:19).

The WMP, prepared by Headquarters, United States Air Force, provides planning factors and current policies to Air Force operational commanders for conducting and supporting wartime operations (7:19). One of the key features of the WMP is that it describes all basic functions necessary to match required resources with planned wartime activity (7:19). The WMP, which is revised annually to coincide with the budget cycle, consists of five volumes which are commonly referred to as WMP-1 through WMP-5. Volume 1 provides mobility guidance and policies to major commands (7:20). Volume 2 contains a comprehensive list of all war and contingency plans (7:20). Combat forces, combat support, and combat service support information is contained in Volume 3 (7:20-21). Volume 4, Wartime Aircraft Activity, identifies the planning positions and employment locations of aircraft (7:20). Volume 5 contains planning factors for consumables such as: fuel, fuel tanks, oil, and hydraulic fluid. Logistics planners concentrate on WMP 3, part 2 and WMP 5. Collectively, the WMP volumes describe planning factors involved in wartime or contingency support (7:19-21).

Air Force operational planning supports the Joint Operation Planning System (JOPS). JOPS is the main part of joint military deliberate planning (22). Deliberate planning is planning for war or contingencies in advance. Deliberate planning is accomplished in 5 phases. Phase I,

initiation., establishes the requirements of the plans and the tasking (22:137). Phase II, concept development, devises a concept of operation for the plan (22:140). Phase III, plan development, has a key objective of providing a feasible and implementable plan (22:156-157). Phase IV, plan review, provides an approved plan (22:158). Phase V, supporting plans, links this and other plans together to ensure they can be support simultaneously (7:22-27). Air Force operational planning begins in Phase V (7:24-25).

Phase III of JOPS is where forces and resources are identified. Then, Air Force planning supports this by identifying specific forces and factors for these resources (22:156-157). Headquarters, Air Force, will direct major air commands as Tactical Air Command (TAC), to prepare an operational plan to support the joint plan. Then TAC will direct each subordinate base to prepare a plan for the individual bases support of this plan. An individual base can have 20 or more plans that support a large variety of war or contingency scenarios. However, a base must ensure it can carry out its day-to-day functions as well as perform the functions required by the plans. The key vehicle for insuring proper performance of base functions is the base support plan. (8)

#### Base Support Planning

Air Force Regulation 28-31 is the principal guidance for base support planning. Base support planning has four

principal objectives: continuing mission support, deployment support, integration of effort, and documenting limiting factors and shortfalls (8:3). Continuing mission support planning describes the activities and requirements to support an installation during a conflict (8:3). This support ranges from direct support of combat operations to indirect support of day-to-day base functions called caretaker duties.

Deployment support focuses on procedures, activities, and resources required to receive, beddown, and outload deploying or transiting forces (8:3-4). Receiving forces requires meeting the forces as they enter the installation and insuring they have billeting, food, and any other resources necessary to sustain operations. Forces received may either beddown or transit an installation. Beddown refers to forces that will deploy from their home location to another location and remain there for the duration of the conflict (8:3,9-10). Beddown is a more permanent arrangement that requires long term allocation of billeting, and dining requirements, as well as supply support for their particular mission. Further required are facilities on the installation to carry out that mission. Many forces will transit (move through) an installation on their way to their employment location. The units may be awaiting transportation, additional equipment, and/or additional personnel. Needs of transiting forces are short term but

will tax base resources above and beyond the primary operational mission of units assigned.

The third objective of base support planning, integration of effort, examines all base resources, taskings and competing demands for resources (8:3). This planning is critical because each unit might have to share resources and facilities. This planning helps to ensure that all the installations resources are being used to the full extent without shortages or overages (7:3-4). The less a unit has to bring with them the faster they can move. Also, other units might be able to use the resources not sent forward. Sharing resources is important during contingencies because many resources will be in short supply and what one unit might not use another unit might need.

Finally, documenting limiting factors, shortfalls, and overages a major effort of base support planning (8:4). By planning for conflicts ahead of time, resources key to the mission can be identified. Current supplies of these resources can be checked to ensure adequate supply levels are maintained to support the planned operation. A shortfall identifies an item needed for a particular mission, however, the mission could take place without the item (8:15). A limiting factor identifies an item as having a severe mission impact (8:15). Without this item the mission cannot be accomplished and would therefore be a limiting factor to carrying out the mission (8:15).



Overages are resources in excess of those required to successfully meet a tasking. These resources can be offered to units requiring them to meet a shortfall or LIMFAC.

The base support plan is supported by a series of annexes as shown in Appendix E of this thesis. Annex A shows the Time-Phased Force and Deployment Lists (TPFDL) (8). The TPFDL identifies the actual and/or types of units required to support the operation being planned (7:24-28). The other annexes include functional requirements such as: intelligence, operations, personnel, manpower, and many others (8). Logistical aspects of the plan are contained in Annex D. This annex identifies all the logistical factors such as maintenance, supply, and transportation required to support a given operation (8).

The base support plan is based on data extracted from major air command operational plans (OPlan). From these plans, the TPFDL is analyzed and required information is extracted to include in the base support plan. The accurate extraction of this data is critical to a valid plan. While an OPlan describes how we fight and support operational units, the BSP describes how we "fight and support" the installation (8:3). Once the data is extracted from the OPlans, the information is passed along to functional area representatives.

The functional area representatives represent different organizations on an installation that have a role in the

wartime or contingency operations of the installation. These representatives utilize the data extracted from plans to prepare their given functional annexes. The information contained in the annex describes how that organization or function will support the base mission during the war or contingency. The compilation of these annexes into the base support plan describes how the entire installation will function during a war or contingencies. (8)

The logistics planner usually chairs the base support planning committee (BSPC) (8:5). The committee is comprised of the tasked functions and organizations on the installation (8:6). The logistics planner, as committee chairman, must assemble all the information provided by the functional representatives. First and foremost, the planner will verify the information provided, to ensure its accuracy and validity. This area provides the greatest amount of difficulty for the planner. As stated previously, many logistics planners are inexperienced and therefore have little background to evaluate this information (16:2-3). Without this experience, mistakes made by others can be missed, and a plan might be developed that is procedurally correct but inaccurate or invalid.

#### Base Support Plan Training

Training. The training function has a primary mission of changing behavior (25:8) The specific behavior changes needed for BSP training are skills and knowledge (25:8).

The skills refer to the actual completion (output) of the desired task (25:9-10). The knowledge changes involve the "concept or principle" behind the task to be performed (25:9). This is the how or the why to the task (25:10).

One of the key elements involved in training is preparation (18:17). Specifically, this preparation is of the source material and the medium used to present the material. To ensure the training is developed correctly, a checklist is highly recommended. The first element of this checklist is to identify the reason for the training (2:83). This ensures a proper beginning for development of the training program. The next step is identifying the audience for this training (4:9-7). Knowing who will receive the training will allow the training program to be tailored to their needs. The final key step to developing training is establishing the training criteria (25:40-41). This criteria will be the baseline for the entire training program.

Air Force Plans Training. Aside from the basic guidance in AFR 28-31, the Air Force does not provide any training for planners in all the base functions that are responsible for BSP preparation (10). Certain aspects of base support planning are encompassed in a multitude of planning courses offered to logistics and operational planners (10). These courses range from classes at the Air Force Institute of Technology to other courses offered by

Air Training Command. However, base support planning is presented only by giving highlights of the plan and the planner's responsibilities. Creation of the base support plan is not taught.

The training course for logistics planners at Lowry AFB contains a segment devoted to base support planning. However, the teaching material used was the Pacific Air Forces (PACAF) Regulation 400-2, Base Support Planning. PACAF developed their own regulation for base support planning that assists new and seasoned planners in BSP development (23). This regulation was published well before the new AFR 28-31. Therefore, much of the material is outdated and must be revised. Also, some of the information is PACAF specific and does not apply to Continental United States or European Theatre military units.

#### Summary

This chapter described the guidance provided by major works pertinent to this research. The basics of military planning were discussed using AFR 28-3 as a reference. The structure of the base support plan (AFR 28-31) was described identifying the major elements of the plan. The elements necessary to plan for base support plan training were identified. Finally, this chapter described the current training offered to base support planners. The lack of experience and training by base support planners justifies the need for specific base support plans training.

The following chapter describes the methodology used to determine the requirements for a base support plan training guide. It identifies the two phases used to accomplish this research. The phases consist of this literature review and a series of two Delphi surveys.

### III. Methodology

This research design is divided into 2 major phases:

I. Determine the major issues involved in base support planning.

II. Identify planning factors that are most difficult to understand and require further definition and explanation. Further, identification of a methodology and format for a base support plan training guide is accomplished.

Phase I was completed through a literature review. A series of two Delphi surveys were used to achieve phase II.

#### Phase I

Determining the major issues involved in base support planning was accomplished through a literature review. The subject of base support planning has received little attention in the various military publications. A Defense Technical Information Center (DTIC) search was initiated finding few sources. These sources were used to establish a broader knowledge base in base support planning. However, these sources were published before Air Force Regulation (AFR) 28-31 and contain many differences. Therefore, the primary source for gathering information was published Air Force Regulations.

The primary regulations used were AFR 28-3 and AFR 28-31. AFR 28-3, USAF Operation Planning Process, is

the primary guidance used for preparation of United States Air Force Operational Plans (7). This regulation provides guidance and standardization for information gathering, development, and format of plans. AFR 28-31, USAF Base Support Planning, is a new regulation published 2 December 1988. This regulation establishes the requirements for Air Force base support planning guidance for developing base support plans (8).

A search of each major command's current base support planning guidance was also accomplished. Military Airlift Command, Pacific Air Forces, and United States Air Forces Europe were found to have specific BSP guidance (20;23). However, since the command regulations were all published before AFR 28-31 was published, their content may be inconsistent with this regulation. Currently all commands are required to review AFR 28-31 and develop supplements or supporting regulations (8:5). Therefore, the primary sources of base support planning information are AFR 28-3 and 28-31 with command regulations used to demonstrate how base support planning information can be presented. The predominate amount of information comes from the newly published Air Force Regulation 28-31, USAF Base Support Planning. (8)

## Phase II

In this phase, identification of the critical elements of base support planning as well as planning factors that

are the most difficult to understand is accomplished through two surveys utilizing a modification of the Delphi method. Further, identification of a methodology and format necessary for a base support plan training guide is accomplished.

Delphi Method. The Delphi method is a means to gather expert opinion through two or more iterations of questions (1). There are three features to this method: anonymity, controlled feedback, statistical "group response" (5:3). Anonymity refers to eliciting the answers privately through prepared questions (5:3). Controlled feedback is accomplished by communicating previous responses to respondents (6:16). The results of the surveys are statistically summarized to achieve a statistical group response (5:3-4).

The Delphi method attempts to eliminate some of the disadvantages of face-to-face group decision making. One of the primary problems with group decision making is one or more dominant individuals may refuse to back down from their publicly expressed opinions (6:15-16). This, in many instances, may cause this dominant individual's opinion to shape the group opinion through pressuring the other group members to conform (5). Further, group members may be influenced by unsubstantiated emotional arguments (1:2).

Through soliciting individual answers, the Delphi method seeks to control these adverse effects. All group



member responses are summarized and returned to the Delphi participants. In this research, the first survey was summarized through identification of like or similar responses. The second survey has been statistically summarized through the median of responses and other comments. Through the first survey, each participant (expert) first stated his or her opinions regarding the issues by responding to the open-ended questions.

The second survey allowed the participants to review comments made by the entire group on the first survey. The experts then responded to the round one responses using one of three methods. First, the experts rated the responses using a five point Likert scale. Second, the experts reviewed the round one responses then provided a new response. Third, the experts ranked the original responses from one to nine.

Because identification of these critical and difficult elements is highly subjective, a modified Delphi method is the most appropriate way to determine these elements. The modification of the Delphi method provides the experts a greater opportunity to express opinions with reduced chance of question bias. The standard Delphi method uses primarily quantitative procedures to determine consensus of responses (1,5,6). Because responses on what is critical or difficult in base support planning is highly subjective, one open-ended survey was used which allows the experts to completely

express opinions about base support plans and their content. The second survey can be used to determine if other experts agree with the opinions stated in the first survey.

Selection of Delphi Experts. The selection of experts for this study was achieved through solicitation of all major air commands for their recommendations of base support planning experts. The initial contact at each command was the office of primary responsibility (OPR) for base support planning. However, both the logistics plans and operation plans organizations were contacted. This researcher's recommendation was the point of contact become the participant for this research because their position as command base support plans OPR identifies them as being an expert in base support planning.

The criteria recommended for evaluation of experts was: At least eight years experience with operational and/or logistics planning; and, five years experience in base support planning at two or more military bases. The experts could be an officer, enlisted, or civilian as long as they qualified in the previously mentioned criteria. Again, these criteria were a recommendation and choices for experts were left up to the command OPR.

Each command was allowed to provide two experts for this research. Using the established criteria, a search, conducted by this researcher, revealed a command may have three or four individuals that meet the "expert" criteria.

However, the search also revealed some commands might have fewer than three experts. The limit of two per command reduced the chance of one command dominating the research with primarily command specific responses. In most cases the operations plans and logistics plans OPRs selected themselves as the experts. Final evaluations of the selected participants and additional expert recommendations were made by this researcher's thesis advisor and the Air Force Logistics Management Center (AFLMC).

Initial contact with the commands provided 15 experts for use in the research. Each individual selected was contacted by telephone to improve response rate by insuring they were willing to participate in this research. All the initially selected experts stated they were willing to participate.

Delphi Survey One. (See Appendix A) The first survey was open-ended (open-response) to allow for written recommendations of critical planning factors, difficult planning areas and/or ambiguous base support planning guidance. The open-ended design was intended to allow respondents an open forum by which they could freely answer the posed questions. Although arriving at a consensus is much more difficult, the ability to obtain openly expressed opinions was considered more important. The open forum allowed the experts to provide a greater detail to each question than just rating a prepared response.

Delphi survey one is divided into three topic areas: Demographics, Operation Plan (OPlan) Interpretation and BSP Development, and Training Guide Format. Demographics, Topic 1, was used to provide background data on each of the experts. The function of this was to determine the experience of each respondent as well as their training background. The data received from the demographics topic was compared with the original criteria used to select the participants. The results of this comparison are shown in chapter IV. OPlan Interpretation and BSP Development, Topic 2, concentrates on the specifics of the BSP and the expert's opinions on difficulties and important aspects of the plan. Training Guide Format, Topic 3, requests expert's input on the methodology and format for a BSP training guide.

Delphi Survey Two. (See Appendix C) The second survey had two objectives: establish a consensus using the responses from the first survey and offer an additional opportunity for further recommendations or comments. The consensus was achieved through restating the original responses and allowing experts to rate the original responses on a 5 point Likert scale (14:255-256). The experts were given the options of strongly disagreeing, disagreeing, agreeing, strongly disagreeing, and neither agreeing or disagreeing. The options allow for expert responses to be statistically calculated to determine a

consensus. The "neither agree or disagree" option allows respondents to choose a middle ground on the statement. The end of each question series includes an opportunity to make additional recommendations or comments.

Survey Two is formatted in two of the three topic areas used in the first survey, Topic 2, OPlan Interpretation and BSP Development, and Topic 3, Training Guide Format. Most of the questions are structured to rate the responses from the first survey. Question one allows the experts to rank order the first survey responses to that question. However, to ensure the most important or critical factors are listed, the original responses are ranked. Two of the questions are designed to allow the experts to review the original responses of the other experts, then rewrite their original response. This allows the opportunity to achieve a consensus on the questions.

Both surveys were initially validated by my thesis advisor. Both surveys were also tested by two logistics planners not participating in the research. The responsibility of these validators was to ensure question and survey bias is reduced and the questions are valid. Bias, refers to the questions leading the participants to a particular response. Bias reduces the validity of a questionnaire and the research for which it is used (14:215-216).

Since the first survey is open-ended, statistical evaluation measures are not applicable. The responses are compared to determine if there are like responses. Like responses are two or more responses to the same open-ended question that have the same meaning. Each like response was combined and rewritten as one response for use in the second questionnaire. Each response was in some way used in developing the second survey.

Decision Rule. The goal of the Delphi method is to reach consensus on an issue (1,5,6). Achieving a consensus might consist of many rounds of questioning. However, because the research being conducted is more subjective than research developing a model or forecast, only two surveys are necessary. The first survey gathered expert opinion on the specific issues. The second achieved consensus on the responses to these issues.

The median of responses was used to determine consensus. The median is used because it is "at least as good as that of one half of the respondents" (5:9). For quantitative estimates, the median would be used to determine the range of responses to a particular question (5:9). The respondents would then receive another survey round to attempt to bring all of the responses closer to the median to achieve a consensus (5:9). Because this thesis is qualitative, only one round of Likert scaled response was needed to determine consensus. Determining consensus for

Likert scale questions was achieved by grouping together "highly agree/agree" and "highly disagree/disagree" responses. This study used the majority rule for defining consensus. The majority rule is greater than 50 percent of the experts agreeing. Normal Delphi technique uses a simple, 50 percent or greater, majority rule to determine consensus (5:10). Forecasting or estimating may require a more stringent definition of majority rule. Because this research is qualitative, 50 percent or greater will provide a valid consensus.

#### Summary

This chapter outlined the research process used to identify the elements and format necessary for a base support plan training guide. This research was divided into two phases: a literature review and two Delphi surveys. The literature review included military and civilian publications. The first Delphi survey was open-ended which allowed the base support planning experts to express their opinion to the series of questions. The second survey achieved a consensus of opinion by the experts. The next chapter analyses the results from the two Delphi surveys.

#### IV. Findings and Analysis

##### Introduction

This section describes the results obtained from each of the two phases of this research. During the first phase, a literature review was conducted. The literature review had major sections: USAF Operational Planning, Base Support Planning, and Base Support plan training. The information gathered from the literature review was used in developing the round one Delphi survey. The second phase of this research was conducted through a Delphi survey of 15 experts in base support planning. This phase gathered the initial information necessary to conduct a second survey. Finally, a second Delphi survey was conducted through the same 15 experts.

##### Delphi Survey

The first survey was divided into three topic areas consisting of ten open-ended questions and six multiple choice questions. Topic 1, the multiple choice questions, was primarily concerned with demographics. The intent was to determine the military and planning background of the participants. This information is used to ensure the qualifications of the participants match the criteria for expert status. Topic 2, open-ended questions, was concerned with difficulties and important factors in base support planning. Topic 3, also open-ended questions, gathered



information about the type of training methodology and format desired by the experts. Topics 2 and 3, being open-ended, provided the experts an avenue for open expression of their opinions. Also, a comment section was provided at the end of the survey to allow for further comments or suggestions. The responses and comments to the first survey are contained in Appendix B.

Both survey rounds had 12 of 15 selected experts respond. The median of responses was used to determine consensus. Determining consensus for Likert scale questions was achieved by grouping together "Strongly Disagree and Disagree" and "Strongly Agree and Agree" responses. The majority rule was used to define consensus. The majority rule is greater than 50 percent of the experts agreeing.

Round One Results. Table 1 shows the responses to the questions in Topic 1. Sixty-Six percent of the participants are in the logistics plans (66XX/661XX) career field. Other career fields represented are transportation, operations plans, and pilot. Sixty-Six percent of the participants were in a planning position when they completed the survey. Other participants held positions directly related to planning. All the participants had at least three Air Force assignments with 58 percent having 7 or more previous assignments. Fifty-Eight percent had one or two assignments involving participation with or in base support planning.

Table 1. Demographic Responses -- Round One Delphi Survey

<u>Topic</u>	<u>Frequencies</u>
Number of Air Force Assignments	
One to Two	0
Three to Four	3
Five to Six	2
Seven or More	7
Number of Assignments in Base Support Planning	
One to Two	7
Three to Four	3
Five to Six	1
Seven or More	1
Number of Years in the Air Force	
Zero to Four	0
Five to Nine	1
Ten to Fourteen	3
Fifteen Years or More	8
Number of Times a Member of the Base Support Planning Committee	
Zero	4
One to Two	7
Three to Four	1
Five or More	0

Sixty-Six percent of the participants had 15 or more years in the Air Force. Only one expert had less than ten years in the Air Force. Fifty-Eight percent of the experts had been members of a base support planning committee from one to two times. Only 33 percent had never been a member of the base support planning committee. The participants had a myriad of technical training experience including pilot training, transportation training, engineering, and

logistics plans. Appendix B shows the extent of training received by the participants. Fifty-Eight percent had some form of plans training ranging from the Contingency War Planning Course to formal logistics plans training.

Topic 2. The open-ended questions provided a forum that allowed the experts to make more than one response to each question. Therefore, some experts had two or three valuable responses. The key aspect of this first survey was to gather information from the experts and use those responses as a baseline for the second survey.

Question A. Question A asked the experts for opinions on what are the most critical or important elements of the base support plan. Nine of the responses included source planning documents or specific information that must be obtained from these documents. One expert mentioned specific planning documents such as the Time Phased Force Deployment Listing (TPFDL) and the Wartime Plans Additive Requirements Report (WPARR).

Other responses to Question A expressed concern over accurate identification of forces transiting through or bedding down at the installation. Three experts considered crossflow of planning information between base agencies and other off-base units as important. Crossflow refers to passing planning information to other units. This information is identified in Air Force and other service TPFDDs. Other concerns such as plan clarity, shortfalls,

Noncombatant Evacuation Operation (NEO) were only mentioned once, but were still used in the second survey.

Question B. Question B is concerned with the most difficult aspects of base support planning. Six of the experts listed a lack of war-time thinking on the part of base level planners as one of the most difficult aspects. Some of the comments expressed concern about the lack of reality in base support planning. One expert stated "many functional OPRs have gotten into a peacetime mode of thought and incorporate peacetime constraints in the plans".

Six experts also expressed concern over identification and sharing of base resources. One expert was not sure that he had accurately identified all the equipment that would remain at the installation. He further stated he did not know how to accurately verify equipment that would remain after other equipment was deployed. An additional concern expressed by the experts was the accuracy and availability of the source planning documents used in the development of the BSP.

Question C. After identifying the most difficult aspects of base support planning, the experts were asked in Question C to explain what caused these difficulties. The primary problem identified was lack of proper plans training. Both the logistics planners as well as the functional area representatives have not received enough training.

In addition to lack of training, the lack of "how to" guidance for logistics planners as well as the functional area representatives was identified as a problem. One of the reasons identified is functional area representatives are assigned to base support planning as an additional duty. Another cause that was identified is lack of involvement in the BSP process by base level commanders. Top down support was not being exercised, therefore, participation in the process by other base members was "half-hearted".

Question D. Question D asks if AFR 28-31 has helped to alleviate difficulties in base support planning. If it has not, participants were asked what should be changed or added to eliminate these difficulties. Nine of the experts stated the regulation needed to be more specific. Although the regulation has created a general baseline for base support planning, additional guidance is necessary for specific problems. Further, it was agreed that the regulation appropriately states what is necessary in a base support plan but fails to identify how to gather information and assemble the plan. One expert suggested the Air Force Logistics Management Center (AFLMC) should produce a guide to assist the logistics planners and functional area representatives. The expert also suggested the MAJCOMs could prepare supplements specializing in MAJCOM specific needs.

Question E. Question E asks the experts to identify any problems they had interpreting planning documents that are used to develop the base support plan. Some experts indicated they had difficulty interpreting planning documents. One of the major difficulties experienced was contradictory information in the different planning documents. Other experts indicated they had little or no difficulty with interpreting planning documents.

Another major difficulty identified is the lack of critical planning documents at the base level. Major commands have specific planning documents at their disposal, however, these documents are not distributed to the base level planners. Some of the experts expressed a concern over the validity of the planning documents they have received. One expert stated that his MAJCOM has documents that could be used to validate planning information and provide other key information not currently possessed by base level planners.

Two experts suggested detailed training as a solution to the plan interpretation problem. It was recommended this training could be added to the Logistics Plans Course at Lowery AFB or added to the Contingency War Planning Course at Maxwell AFB. Also, closer MAJCOM participation in the base support planning process was identified as being critical.

Question F. Question F pertains to any problems the experts have had with functional area representatives developing base support plan annexes. The experts identified two major difficulties concerning this issue. First, half of the experts felt the lack of planning knowledge and training is a key problem with functional area representatives. The experts felt a representative might be knowledgeable in their specific functional area, however, they might not have any experience or training with developing BSP annexes. Second, the representative is almost always assigned BSP responsibilities as an additional duty. The representative must perform their primary job as well as perform the responsibility of BSP representative. One expert commented "...if commanders don't send qualified individuals...it diminishes quality" of the BSP.

Question G. After the BSP is developed, the base level planner must ensure the information provided by the base support planning committee (BSPC) is accurate. Question G, asks experts how they ensure the information provided to them is accurate. Six different methods of verifying the information were identified. One method identified was not verifying the information personally but relying on the representatives to produce and accurate annex.

Another method for verifying the accuracy of BSP data is comparing the information received from the BSPC to the Time Phase Force Deployment Data (TPFDD). Any problems

identified would be annotated and researched. Another method is to visit each representative and review the annex thoroughly. One expert stated his BSP is reviewed through local exercising. Reading the BSP as if it were going to be executed was another verification method used by an expert.

Question H. Question H refers to determining what units would transit or beddown the installation. The key problem identified was ensuring the data gathered is complete. One expert suggested that without actually executing the BSP it is difficult to ensure all the support required by forces is met by the plan.

Other experts explained their primary problem with determining transiting or beddown units was receiving all service TPFDD's. This is the key method used to determine transiting or beddown forces, however, these TFPDD's are not readily available to the base level planner. Another problem, identified by an expert, was extracting the data from the various classified source documents.

Topic 3. This topic area concerns the methodology and format necessary for a base support plan training guide. Question A asks what method should be used to present a training guide. Four general responses were given: "how to" manual, checklist, computer program, and combinations of the three. Question B asks how the choice in question A should be formatted. These two questions will be combined to report them for this round only.



A "how to" manual explaining the precise process necessary to develop the BSP was one of the suggestions for the training guide. This manual would include data extracted from planning documents, guidance for functional area representatives, and specifics on the actual preparation of the plan. A checklist was also suggested which would enumerate the series of steps necessary to complete the plan. Most experts who suggested the checklist felt it would also be necessary to accompany this checklist with a manual. A combination of manual and checklist was also suggested as providing the greatest amount of value to the base support planners.

Two types of computer programs were suggested: A computer aided instruction (CAI) program and computer based BSP development program. The CAI program would teach the planner how to develop the base support plan. Other lessons could then be added to also include the functional area representatives.

The other computer program would actually assist the planner in developing the plan. The program would prompt the planner for required information needed in the BSP. When all the information is entered into the computer, the program would generate the base support plan and appropriate annexes. Two experts admitted this program would be difficult to develop and might not solve all the BSP problems.

Other Comments. Each expert was encouraged to express any additional comments about the survey or base support planning on the last sheet of the survey. Three used the additional comment area. These comments are listed in their entirety in Appendix B. One expert proposed the idea of a unified planning cycle for all Air Force and joint plans. This would ensure the information in the planning documents was obtained at the same time. The expert further recommended a simultaneous release of these plans.

Another comment expressed concern over the usefulness of AFR 28-31. The expert felt this regulation "provided little more than a format" and did not identify needed specifics in BSP development. This places the detail responsibility on the MAJCOMs.

The third expert expressed concerned over lack of involvement by base level commanders in the BSP process. The expert stated this important document should receive full participation from all commanders. The commanders should also emphasize the importance of the BSP to their subordinates. Further stated was the commanders should direct the BSP process to ensure its completion and accuracy.

#### Round Two Delphi Survey

The round two Delphi survey gave the experts an opportunity to view responses made by the other experts in round one. Round two allowed the experts to express their

opinions about the round one responses. A consensus was achieved on all of the questions. Topic 1, demographics, was omitted in this round because the background information on the experts did not need to be repeated.

Topic 2. Question A asks for the most critical or important BSP elements. The experts were asked to rank, from one (most important) to nine (least important), the round one responses to this question. Those responses they felt did not belong in a list of problems would be indicated with a zero. For the purpose of this research, the top five responses to this question are considered the most important or critical. This was calculated using the median responses. The calculations are shown in Table 2.

Question A. All experts unanimously agreed (A1) that the planning documents used to develop a base support plan are one of the top five important elements in a base support plan. Ten of the twelve experts placed planning documents in the top two most important elements. These documents are the baseline for which the base support plan is developed.

A consensus was also achieved (A4) with the experts agreeing the total force capability (worse case scenario) of an installation was important. This worse case scenario was considered by 83 percent of the experts as being one of the top five important elements.

Seventy-Five percent of the experts agreed (A2) that force integration was one of the top five important BSP

elements. Force integration refers to home base and employed units working together. Ensuring equipment and facilities are shared between home base and employed units is critical to a successful mission.

Flexibility in planning allows for changes during plan execution. 67 percent agreed (A8) this flexibility is an important aspect in base support plans.

Table 2. Question A; Most Critical or Important Elements --  
Round Two Delphi Survey

<u>Response</u>	<u>Median</u>	<u>Consensus</u>
A1	2	100%
A2	4.5	75%
A3	4	58%
A4	3	83%
A5	7	
A6	6	
A7	8.5	
A8	4	67%
A9	5.5	

Planning for reception, beddown, and outload of transiting forces was also considered important. Fifty-Eight percent of the experts (A3) placed this concern in the top five important BSP elements.

Question B. In response to the question regarding the most difficult aspects of base support planning, the experts rated seven responses. These responses were recorded from

the round one Delphi survey. Each response was rated on a five point Likert scale. The rating categories are: Strongly Disagree, Disagree, Neither Agree or Disagree, Agree, and Strongly Agree. To calculate consensus, the categories Strongly Disagree and Disagree, will be combined. The same will be done to the Agree and Strongly Agree scale items. The median response will be used to determine consensus.

Table 3 shows the ratings to responses B1 through B7. This question is designed to determine what the experts feel are the most difficult aspects of base support planning. In this question, a consensus was achieved by a majority of the experts agreeing that all seven responses were important BSP aspects.

Responses B4 and B7 received agreement by 92 percent of the experts. Response B4 emphasized realistic and accurate (current) enumeration of force requirements. This position was also echoed in the comments. One expert stated "researching" the applicable planning documentation was key to accurate planning. This issue was mentioned many times in the first survey. Most of the experts are concerned with the accuracy (currency) of the planning documents used in BSP development. Further, they are concerned as to whether the documents are being interpreted correctly.

Table 3: Question B; Most Difficult BSP Aspects -- Round Two Delphi Survey

<u>Response</u>	<u>Ratings</u>					<u>Median</u>	<u>Consensus</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
B1	1	0	2	4	5	4	75% Agree
B2	0	1	4	5	2	4	58% Agree
B3	0	0	2	9	1	4	83% Agree
B4	0	0	1	6	5	4	92% Agree
B5	0	0	5	4	3	4	58% Agree
B6	0	0	2	7	3	4	83% Agree
B7	0	0	1	7	4	4	92% Agree

Response B7 expressed the expert's concern over the importance placed on the BSP by base agencies and commanders. This sentiment was expressed by one expert when he stated:

The process of implementing base support planning is met with resistance. Most people feel it's a duplication of effort since plans already exist to cover most wartime areas.

Again, many experts expressed this feeling of lack of importance in Delphi Round One.

Question C. Question C requested the expert's opinion on what causes the difficulties they identified. Seven of the original twelve round one response were used in this round of questioning. The other five responses were combined with like responses to this question. Table 4 shows the ratings for the responses to this question.

Table 4: Question C; Causes of the Most Difficult BSP Aspects -- Round Two Delphi Survey

<u>Response</u>	<u>Ratings</u>					<u>Median</u>	<u>Consensus</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
C1	2	3	3	4	0	3	No Consensus
C2	0	0	0	6	6	4.5	100% Agree
C3	0	1	3	6	2	4	67% Agree
C4	2	6	2	1	1	2	67% Disagree
C5	0	1	3	2	6	4.5	67% Agree
C6	0	1	1	6	4	4	83% Agree
C7	0	1	2	7	2	4	75% Agree

The response (C1) that senior personnel with planning experience are retiring is a problem in base support planning did not reach a consensus. The suggested solution (C1), greater emphasis on military history in logistics, was not accepted by the experts.

The opinion that the BSP is not emphasized by senior leadership is supported by the unanimous consensus for response C2. This response stated that a key BSP difficulty is the lack of involvement by commanders. In comments, one expert stated that greater emphasis is placed on passing ORIs than support of the BSP process. One comment suggested that greater support by commanders would flow to the functional representatives and would assist in producing a better product.

As stated many times in the first round survey, response C5 addresses the lack of plans training. Sixty-

Seven percent of the experts agreed that lack of training is a key difficulty in BSP development. If the copied plan is incorrect, then new plans are being created with the same problems. Another area agreed upon by the experts as creating difficulties is a lack of personnel resources in the base planning functions.

The experts disagreed with response C4. This response stated that classification of the BSP reduced information crossflow and created difficulties in BSP development. The experts did not feel that classification of the BSP would create development difficulties.

Question D. In developing a training guide, it is essential to determine if other directives or training guidance is useful in developing base support plans. AFR 28-31 was developed to provide BSP guidance to base level planners. Question D is designed to determine if AFR 28-31 has alleviated BSP difficulties. If it had not, what should be added or changed to relieve these difficulties. The rating of responses to this question are displayed in Table 5.

Responses D1 and D2 reflect the expert's opinions that AFR 28-31 has provided a needed standard for use in base support planning. However, the experts felt that this standard was far too general and needs greater detail. Agreement (D6) was achieved that either a command



supplement or a training guide is needed to address this increased detail.

Table 5: Question D; Does AFR 28-31 Alleviate BSP Difficulties -- Round Two Delphi Survey

<u>Response</u>	<u>Ratings</u>					<u>Median</u>	<u>Consensus</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
D1	0	0	4	5	3	4	67% Agree
D2	2	1	2	5	2	4	58% Agree
D3	2	5	1	3	1	2.5	58% Disagree
D4	0	0	2	8	2	4	83% Agree
D5	1	1	4	3	3	3.5	
D6	0	2	2	4	4	4	67% Agree

83 percent of the experts also agreed (D4) that a greater emphasis must be placed on total force integration. The emphasis must be applied from headquarters to the base planners. The force integration must include all Air Force Units as well as units from other services.

The experts disagreed with response D3, which stated more CONUS responsibilities should be added to AFR 28-31. They disagreed that AFR 28-31 was written to accommodate overseas commanders. This also relates to response D5, adding more specifics to AFR 28-31.

A consensus was not achieved for response D5. This response suggested AFR 28-31 should not be changed to add specifics. Alleviating the difficulties should be left up to the individual units. Although three experts agreed and

three experts strongly agreed, four of the experts neither agreed or disagreed. The four "middle" responses indicate this response might not fully address the original question. Therefore, this response will not be considered.

Question E. This question was structured differently than the previous questions. The original question asked the experts to state any difficulties they had in interpreting planning documents for use in the base support plan. All of the round one responses to this question were repeated in their entirety in this round. The expert was asked to read these responses, then provide a new response to this question. The structure was designed this way because each expert may have experienced different difficulties. It would not be useful to have these difficulties rated by the other experts. By reading the difficulties the others have had, an agreement on a primary difficulty might be reached.

Three of these highly experienced experts felt that plan interpretation was a problem that could be overcome with training. They agreed, with experience, the job of interpreting the plans will become easier. Almost all of the experts felt the "out of cycle" nature of planning documents can bring into question the validity of the base support plan. They felt little confidence in the "currency" of the planning data used in the BSP. One expert commented

that the TPFDD and WAA listed an F-4 unit to beddown, when the beddown plan itself listed an F-16 unit.

Question F. Question F in the round one Delphi survey asked the experts what difficulties are involved in tasking functional area representatives to develop BSP annexes. As in Questions B through D, the experts were asked to rate the original round one responses using a five point Likert scale. Majority rule was used to determine consensus on this question.

Table 6: Question F; Difficulties With Functional Area Representatives -- Round Two Delphi Survey

<u>Response</u>	<u>Ratings</u>					<u>Median</u>	<u>Consensus</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
F1	0	1	1	6	4	4	83% Agree
F2	1	2	1	7	1	4	67% Agree
F3	0	0	2	2	8	5	83% Agree
F4	0	0	0	4	8	5	100% Agree
F5	0	0	3	5	4	4	83% Agree

The twelve round one responses were narrowed to five by combining the like responses. Consensus was achieved for all five responses. The experts were in total agreement (F4) that a problem with functional area representatives is prioritization of their day-to-day jobs over planning. In three cases, 83 percent agreed that the problems are: lack of planning knowledge and experience (F1), additional duty versus full-fledged mission (F3), and the lack of

qualifications to address issues in their support areas (F5). Sixty-Six percent felt that unit commanders were not knowledgeable of the planning process, don't provide support, and view the process as something "...they really don't want to do".

The experts all agree that lack of experience, additional duty, and prioritization are primary problems. Effort, therefore, must be made to overcome the experience problem and make plan preparation easier.

Question G. As mentioned in the preceding paragraph, annexes produced by functional area representatives should be closely scrutinized for accuracy and validity. The ultimate responsibility for BSP accuracy and validity usually rests with the base logistics planner. Round one Delphi survey Question G, asks the experts how they verify the information produced by the representatives. In this round the original 12 responses were combined to create five responses which were rated using a five point Likert scale. The rating for these responses are contained in Table 7.

Table 7: Question G; Verifying Information Accuracy -- Round Two Delphi Survey

<u>Response</u>	<u>Ratings</u>					<u>Median</u>	<u>Consensus</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
G1	0	2	1	6	3	4	75% Agree
G2	0	2	2	5	3	4	67% Agree
G3	2	5	2	2	1	2.5	58% Disagree
G4	0	1	2	7	2	4	75% Agree
G5	0	0	2	4	6	4.5	83% Agree

Ensuring the accuracy of documents produced by others is always a difficulty experienced by managers. Verifying the accuracy of the annexes in the BSP is no different. Eighty-Three percent of the experts agreed with personally reviewing the annexes. This review would be accomplished from a "going to implement the plan" perspective. The other suggestions by the experts also levy a great burden on the base level planner. Seventy-Five percent of the experts agreed with verifying the annexes with the source planning documents such as the TPFDD.

The experts disagreed with trusting the functional area representatives to produce the annexes without verification. One of the experts stated trusting the representatives without verification would be "foolish". Obviously, the expert stated, these representatives "do not have the planning experience I do". They may be knowledgeable in their respective areas, but not necessarily in planning. Therefore, "I must ensure their product is consistent" with the other annexes.

Question H. This question, as with Question E, does not use a Likert scale to rate the round one responses. The experts were asked to review the original round one Delphi survey responses, then provided a new response. Again, as in Question E, individual problems and solutions are highly subjective. Rating these responses would not be useful to

this research. Therefore, the expert was asked to read the original responses then provided a new response.

The experts were asked to provide a new response to the problem of determining what units were tasked to transit or beddown the installation. As stated previously, the experts are not confident with the completeness of the source documents being used. While they feel active Air Force data is accurate, they are not comfortable with data on reserve forces and forces of other services that will use the base.

Another issue that was stated previously is concern over proper interpretation of the planning documents. The experts stated they felt confident with their interpretations but not the interpretations of others. One expert commented concern over the accuracy of the BSP areas delegated to representatives causes him to "rewrite the plan" before final submission. This need to rewrite the plan defeats the purpose of delegating development of annexes to functional area representatives.

Topic 3. The format of the BSP training guide is the main thrust of the questions in this topic area. Knowing what subject material to emphasize in a training guide is the first step to its development. The next step is insuring the guide is placed in the proper format. This format should allow for ease of use while providing all the critical information necessary to properly develop a base support plan.

Round one Delphi survey provided three different types of formats for the BSP training guide. The methods suggested for this training guide were: "how to" manual, checklist, and computer program. In round two, the experts indicated that a combination of formats is needed. Table 8 displays the different types of methods and the expert's frequency of choice.

Table 8: Question A: Training Methods -- Round Two Delphi Survey

<u>Response</u>	<u>Frequency</u>	<u>Consensus</u>
How To Manual	1	
Checklist	1	
Computer Program	1	
How To and Checklist	1	
How To and Computer Program	7	58% Agree
Checklist and Computer Program	1	

Fifty-Eight percent of the experts suggested a combination "how to" manual and computer program. The how to manual would explain the intricacies of base support planning for both logistics planners and the functional area representatives. One expert recommended the manual and program be supplemented with course or seminar instruction by experienced base support planners. The computer program would provide an online course to teach the novice planners the specifics of base support planning. An expert warned the computer program would be difficult to develop because

of the classified documents necessary in base support planning. This reference was to the suggestion that a computer base support plan development system be developed. Information would be entered into the computer, and the computer would process the information and produce the BSP and appropriate annexes. This suggestion is further addressed in Question B.

Question B. This question asks the experts how their suggested training method should be formatted. The original twelve responses were narrowed to five responses through combining like comments. A five point Likert scale was used by the experts to rate the original five round one Delphi survey responses. Table 9 displays the rating frequencies, medians, and consensus calculations.

Table 9: Question B; Formats for a BSP Training Guide  
-- Round Two Delphi Survey

<u>Response</u>	<u>Ratings</u>					<u>Median</u>	<u>Consensus</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
B1	2	5	3	2	0	2	53% Disagree
B2	0	0	4	6	2	4	67% Agree
B3	0	1	2	6	3	4	75% Agree
B4	0	2	2	6	2	4	67% Agree
B5	1	2	2	7	0	4	58% Agree

The experts disagreed with the use of a checklist with lesson plans. Comments indicated this type of method would not provide the training base for the base support plan.



Expert agreement with responses B3 and B4 indicate they prefer the training guide be computer based in some way. Response B3, self-paced computer assisted instruction, received a 75 percent agreement by the experts. This method would allow the individual who required BSP training to participate in the course at his or her own leisure. Areas of concern or importance to the individual could be emphasized by selecting those specific lesson areas. One expert disagreed with the computer instruction approach. This expert commented that a "live instructor" was needed to ensure the student understands the lessons.

Response B4 recommends a computer based BSP development system. This system would prompt the user for a series of inputs and use the inputs to develop the BSP. These inputs would be the data extracted from the source planning documents.

In response to B4, 58 percent of the experts agreed the manual portion of the training guide should be formatted similar to the Air Force Logistics Management Center (AFLMC) Mobility Control Center Handbook (21). This handbook explains the different requirements levied upon members of the Mobility Control Center (MCC). Individual chapters are dedicated to the different functions required during a mobility deployment. Also, chapters are included that give guidance to the MCC augmentees. The augmentees are similar to the functional area representatives. The augmentees

represent different tasked functions on the base and during the exercise are under direct control of the Installation mobility Officer. They are assumed to have knowledge in the respective areas but may possess little or no experience in mobility operations. The BSP representatives have the same problem, knowledge in their respect areas but little or no planning knowledge or experience.

#### Summary

This chapter described the results of the two Delphi surveys used in this research process. The first survey established the responses that were rated by the experts in the second survey. The second survey used these responses and allowed the experts to either rate or rewrite original responses.

The next chapter concludes this research by answering the five original research questions. From the information gathered, two recommendations are also presented.

## V. Conclusions and Recommendations

The key to United States military preparedness is planning. Planning ensures the military has the resources and personnel necessary to perform a given military mission. The base support plan is a key element to this preparedness. This plan enumerates the resources and personnel necessary for an installation to support military operations during war or contingencies. Until recently, this critical planning aspect was without Air Force wide guidance for consistency and completeness.

Air Force Regulation 28-31 was developed to provide guidance to Air Force units on preparation of the base support plan. The Air Force Logistics Management Center (AFLMC), as well as many experts in the field of planning, feel this regulation is not complete. They state AFR 28-31 describes what is required in a base support plan without explaining how to develop and format the data. A need for a training guide was apparent, however, the question of the guide's content and format was not answered.

This research set out to determine what should be in a United States Air Force Base Support Plan Training Guide. A two phased research approach was designed to determine the content and format for a base support plan (BSP) training guide.

Phase I of this research involved the review of BSP related literature. The review covered literature in Air Force planning, civilian planning, and training. Phase II involved development of two Delphi surveys that were sent to 15 base support planning experts, 12 of which experts responded. The first survey used in this research was open-ended in design. This allowed the experts to openly express their opinions on eight questions. The information gained from these questions was directly used in development of the second survey.

The second survey utilized the responses from the first survey to gain a consensus of opinion from the selected experts. The same 15 experts were selected with 12 responding to the survey. These responses were rated three different ways. Five questions were rated using a 5 point Likert scale. Two questions were rated by comparing the open-ended responses. One question was rated on a scale of one to nine. The top five items are reported in this chapter. The five investigative questions expressed in Chapter I of this thesis were answered solely from the two Delphi surveys.

The median of responses was used to determine consensus. Determining consensus for Likert scale questions was achieved by grouping together "highly agree/agree" and "highly disagree/disagree" responses. This study used the

majority rule for defining consensus. Majority rule is 50 percent or greater of the respondents agreeing.

### Conclusions

Research Question One. What are the critical elements involved in base support planning?

The experts unanimously agreed planning documents such as the Time Phased Force Deployment Data (TPFDD), and the Wartime Aircraft Activity Report (WAAR), are the most critical elements of the base support plan. The accurate interpretation of these documents are critical to a valid and executable plan.

The second most critical element of base support planning is insuring the total force capability is considered when developing the base support plan. This total force capability is called the worse case scenario. The worse case scenario ensures that all possible concurrent uses of all the installation's resources and personnel is planned. A base support plan based on the entire installation's tasking would ensure effective support during the worst contingency or war scenario.

The experts next agreed that planning for force integration was critical in base support planning. This integration allows for all home base and employed units to work together. Involved in this is the sharing of resources, facilities, and personnel. The employed units will need facilities to carry out their operations. These

units will also need equipment such as vehicles as well as resources like food and other consumables. Through planning for these needs, resources may be identified that can be shared. Any resources that are not needed can be allocated to other units for their use.

The fourth critical element in the top five is flexibility. Planning flexibility would allow the BSP to be executed with ease of changes.

Finally, the experts agreed planning for activities responsible to receive, beddown, and outload transiting or deploying forces is critical. The reception of forces refers to meeting short term requirements of the forces. Temporary billeting and feeding are key to this short term support. Transiting forces will also require movement to other installations called outloading. Outloading requires identification of the total amount of personnel and equipment and their preparation to move via military transportation. Beddown refers to forces that will remain at the installation for an indefinite period of time. These forces require long-term billeting, messing, and work facility arrangements.

Research Question Two. How does AFR 28-31 help or not help the planner in developing the base support plan?

Delphi survey Question 2D, (Appendix A and C) addressed the issue of AFR 28-31 assisting the base support planner. The experts agreed AFR 28-31 has assisted the base support

planner by providing standardized guidance. However, they also agreed this guidance does not completely address how to prepare the base support plan. They agreed the regulation, or some supplement, must pay more attention to force integration and total force capabilities. These two issues were also addressed by the experts as being the most critical elements of the BSP.

Research Question Three. What are the common difficulties in developing a base support plan?

Survey questions 2B, 2C, 2F, 2G, and 2H addressed this issue. One key problem expressed by the experts is getting base agencies to fully commit to base support planning. They agreed the problem begins with lack of commitment from commanders. This lack of commitment flows to the functional area representatives who do not place importance on base support planning. Another problem is many of the representatives assigned to BSP duties are not experienced or trained in planning. This lack of training or experience results in poorly developed or inaccurate annexes. The annexes are key to an effective plan. Without accurate annexes the BSP becomes invalid and not useable. The experts agreed increased training of the representatives would be a good step in improving the quality and accuracy of the BSP annexes.

Another primary difficulty, identified by the experts, is accurate interpretation of the source planning documents

used to develop the BSP. The experts felt confident in their own abilities to interpret the planning documents. However, they stated they have many years experience in this area. New planners do not have this experience and are not being properly training in plan interpretation. The experts highly recommended specific training in reading, analyzing, and interpreting planning documents. This would assist the process of collecting the data needed to develop the BSP.

The expert's comments indicated a method is needed to verify the information in the BSP. All of the annexes in the BSP are prepared by personnel representing other organizations on the base. Most of the experts used their own personal experience to verify the information contained in these annexes. This, of course, assumes the planner has knowledge of base wide functions and planning documents. Some rule of thumb or procedure is needed to validate this information to ensure the accuracy of the BSP. This validation procedure should be detailed to allow use by the novice planner.

The final difficulty expressed by the experts is obtaining the proper source planning documents to be used in the BSP. Some of these documents are not provided to the base level planners. The major commands (MAJCOM) usually have these documents but do not always pass them along to their subordinate units. Without these documents, the base



level planners do not have an accurate assessment of the forces that will transit and/or beddown their installation.

Research Question Four. What, if any, are the prime difficulties in interpreting operational plans and extracting pertinent and consistent data for inclusion in base support plans?

The experts previously identified extracting data from planning documents is a key difficulty in base support planning. Question 2E, asks the experts what are these difficulties. The experts agreed with two major difficulties: lack of training, and out of cycle planning documents.

The experts indicated extracting data from plans is not easy. There are a multitude of codes that must be identified to gain the required data. These codes are sometimes difficult to interpret. The planner needs greater training to work with the intricacies of these codes. The training should emphasis each of the principal documents used in base support planning.

The issue of out of cycle planning cannot be alleviated in a training guide. However, the MAJCOMs, and service headquarters must get involved to eliminate this problem. The experts suggest a uniform planning cycle for all military planning documents. This uniformity would ensure all the units are getting the same information. The cycle

would reduce the chance of planning documents contradicting each other.

Research Question Five. What is the most useful method of presenting a base support plan training guide?

Topic area three addressed the issue of training methodology and format. A consensus of experts agreed the best method for base support plan training is a "how to" manual and computer aided instruction (CAI) program. The experts agreed the manual should explain how to develop the BSP. AFR 28-31 explains what is needed in a base support plan, but not how to develop this plan. A development manual would explain the specific steps required to develop a BSP. The manual would need to be comprehensive enough to allow use by the novice planner.

The computer program would contain a series of lessons designed to explain the individual steps involved in the base support planning process. Each lesson would describe the process as well as how to get to that point. The "student" could select lessons where they felt weak or needed to refresh their knowledge.

Another format, suggested by the experts, for a computer program would be a BSP development system. This system would utilize the information extracted from the source planning documents along with the annexes provided by the representatives. This information would be entered into the computer, then the program would produce the base

support plan and the appropriate annexes. Two problems surface with this program. The first is information accuracy. Although the computer will generate the plan, the information used by the computer is manually extracted. Therefore, there is no assurance that the information is valid. The second problem is classification. Portions of the base support plan are classified. To produce these portions a computer cleared for classified information would be needed. While the logistics plans offices that compile the BSP usually have computers cleared for classified operation, the functional area representatives may not. This causes problems with passing information from the logistics plans office and the functional area representatives office.

### Recommendations

The experts provided a wealth of information for the content and format of a base support plan training guide. Through this research, two recommendations are made.

Recommendation One. The first recommendation is the information acquired through this research be applied to the development of a base support plan training guide. This guide should be a combination of two training formats: "how to" manual and a computer aided instruction program. The answers to four of the five research questions will provide the baseline for the content of this guide. The experts placed great emphasis on the lack of training and experience

possessed by the functional area representatives.

Therefore, a recommendation is made that a new separate manual or pamphlet, or distinct portion of an existing document, be devoted to training the functional area representatives. The CAI program can possess a series of lessons designed exclusively for functional area representative training.

Recommendation Two. Three major concerns were agreed upon by the experts that cannot be totally addressed in training guides. The first concern was the lack of involvement by commanders in the base support planning process. The experts felt these commanders did not give the plan the emphasis it deserves. Without this commander support, the quality of the plan may suffer. The second issue is the source planning documents used to develop the BSP. The experts expressed concern over the out of cycle publishing of these planning documents. The third concern was the lack of personnel resources in the logistics plans office. One of the respondents stated that if he had additional personnel resources, development of the base support plan would not be a problem. It is recommended, these three issues be addressed by the Air Staff or other responsible agencies.

A specific training guide, at high level, could be specifically designed for commanders. It would outline how functional area representatives must develop plans and how

the base support planning committee (BSPC) must work. While this will not guarantee that commanders will emphasize the BSP, the commanders will be able to understand their responsibilities under AFR 28-31 and the importance of the BSP. How this guide would be developed is a subject for further research.

### Summary

This research set out to determine the content and format for a base support plan training guide. Two Delphi surveys were used in this research. The surveys were distributed to 15 experts in base support planning. The answers to the five investigative questions were answered from these two Delphi surveys.

Although no one training guide format was unanimously agreed upon by the experts, a combination of "how to" manual and computer program did receive a majority consensus. Both the manual and program must explain "how to" develop a base support plan. The best format for the computer program is a computer aided instruction program. This program would contain series of lessons ranging from data extraction to how functional area representatives should develop their annexes. The manual and program must be designed for use by the novice planner as well as the experienced base support planner.

The manual needs to be a step by step guide on how to develop the base support plan. First, the process of

extracting the required information from the source planning documents should be explained. What documents need to be used and what information should be extracted are essential in this section. Next, the logistics planner must be told how this information should be used. Issues such as integration of effort, total force capability, flexibility, and force reception, beddown, and transition must receive attention in this guide. What information should be given to the functional area representatives must also be stated.

The functional area representatives must be shown how to use this information in the development of their annexes. How to interpret this information must be explained. Using the prescribed structure in Air Force Regulation 28-31, the representatives will be shown how to assemble the information into an annex. Finally, a method of verification of the data produced by the representatives must be developed. This verification method would be used by the logistics planner to ensure the annexes are accurate as well as valid.

Appendix A: Round One Delphi Survey

6 May 1989

HQ TAC/LGX  
Attn: Major Jones  
Langley AFB, VA 23665-5000

Dear Major Jones:

Thank you for agreeing to participate in this AFIT Delphi survey. The purpose of this research is to determine the content required to develop a base support plan training guide. You were selected to participate in this research because your experience and current position qualify you as a base support planning "expert". Your opinions and comments will be combined with other "expert" opinions to provide some insight into what a base support plan training guide should contain. For this purpose, it is important that you are candid and thorough with your answers.

The attached Delphi survey solicits your personal opinions in a number of areas. Delphi is a research methodology used to elicit opinions from a group of "experts". These opinions will be reflected in this survey through open-format questions. Your responses to these questions will be used to develop the second questionnaire. As soon as all the responses to this survey are received and compiled, the second survey will be mailed to you. This second survey will allow all the selected "experts" to rate the responses in the first survey. To assist in this research, please return the survey in the enclosed envelope by 23 May 1989.

Once both surveys have been completed they will be compiled and a summary of this research will be provided to you. The ideas that you and the other "experts" express could be incorporated into major command supplements to Air Force Regulation 28-31. This research will also be used to assist in the development of a base support plan training guide being developed at the Air Force Logistics Management Center.

Your comments, ideas, and suggestions regarding this research and base support planning are encouraged. If you have any questions about this survey or this research, please call me at (513) 878-7781 or AV 785-5435. Thank you again for taking the time to share your expertise.

MARK S. TALLEY, 1LT, USAF  
Graduate Student  
Air Force Institute of Technology

2 Atch  
1. Delphi Survey  
2. Return Envelope

## Round One Delphi Survey

### 1. Survey Objectives:

To obtain expert opinion on the specific elements required to develop a base support plan training guide.

### 2. Definitions:

The following definitions are provided by Air Force Regulation 28-31.

a. Base Support Plan (BSP): The installation level plan to support unified and specified command wartime operation plans, as well as MAJCOM supporting plans. It cuts across all functional support areas in a consolidated view of installation missions, requirements, capabilities, and limitations to plan for actions and resources supporting war or contingency operations, including deployment, post-deployment, and employment activities (as appropriate). The BSP requires annexes from each of the functional installation areas (i.e. supply, transportation, operations, etc..) that require extrapolation from installation and MAJCOM planning documents.

b. In the confines of this survey the Base Support Plan, Joint Support Plan, and Conus Base Use Plan will be considered the same plan.

c. Base Support Planning Committee (BSPC): A group of cross-functional representatives from base-level host and tenant operations and support agencies whose purpose is to review requirements and develop base support plans. The BSPC serves as the focal point for plan development and reports to the installation commander on the status of base support plans. It serves to integrate the numerous base-level requirements and functional support actions to present a coordinated overview of base support activity in the BSP.

### 3. General Comments and Instructions:

a. The subject areas in this questionnaire are not meant to be complete or exhaustive. Instead, the coverage is designed to stimulate your thinking.

b. Your participation and honest opinions are key to the success of this research project. There are no right or wrong answers. Therefore, all your ideas and comments are important and should be included.

c. Two rounds (sets of questionnaires) will be needed to arrive at a group consensus. This round should take no more than an hour. Please answer all questions as thoroughly as possible. If additional space is needed please include your additional comments on another sheet of paper.

The second round will take less than thirty minutes to complete.

d. You will be provided a summary of this research after it is completed. The number in the upper right-hand corner of this



questionnaire is for survey control purposes. Please be assured that complete anonymity will be enforced.

e. Any ideas or recommendations you have for developing a base support plan training guide or help that could be provided to a base support planner would be greatly appreciated. The last page of this survey is for any additional comments you feel are pertinent to this study.

f. If you have any questions about this survey please call First Lieutenant Mark Talley at (513) 878-7781 or AV 785-5435.

THANK YOU FOR PARTICIPATING IN THIS SURVEY

TOPIC 1: Demographics

a. What is your current AFSC and job title?

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b. How many Air Force assignments have you had (counting assignments back to the same job or base)?

- ☐ 1 to 2
- ☐ 3 to 4
- ☐ 5 to 6
- ☐ 7 or more

c. How many of the assignments mentioned in question b involved participation with or development of base support planning?

- ☐ 1 to 2
- ☐ 3 to 4
- ☐ 5 to 6
- ☐ 7 or more

d. How many years have you been in the Air Force?

- ☐ 0 to 4 years
- ☐ 5 to 9 years
- ☐ 10 to 14 years
- ☐ 15 years or more

e. How many times have you been a member of a base support planning committee (only count one for each assignment)?

- ☐ 0
- ☐ 1 to 2
- ☐ 3 to 4
- ☐ 5 or more

f. Identify the Air Force technical schools you have attended.

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TOPIC 2: OPlan Interpretation and BSP Development

a. What do you consider as the most critical or important elements of the base support plan?

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b. What are the most difficult aspects of base support planning (please give examples)?

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c. What causes the difficulties you identified in question 2b (i.e. lack of training, poor guidance, difficult to understand, etc..)?

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d. Does AFR 28-31 help alleviate these difficulties? If so, how, if not, what should be added or changed to relieve these difficulties?

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e. Have you had any difficulties in interpreting planning documents (i.e. OPlans, WMP, etc..) for use in base support plans? If so, what are these difficulties?

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f. What, if any, are the difficulties in functional area representatives being tasked to develop base support plan annexes?

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g. What is your method of verifying the accuracy of information developed by BSPC members or others tasked with completing annexes?

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h. Discuss the problems you have had, if any, determining what units were tasked to transit or beddown your installation? If you fixed the problems, explain how?

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TOPIC 3: Training Guide Format

a. What method should be used to present the training guide (i.e. manual, computer, checklist, combination, etc...) and why?

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b. Explain how the method you indicated in question 3a should be formatted.

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THANK YOU FOR YOUR EFFORT

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.



Appendix B: Delphi Round One Comments

TOPIC 1: Demographics

Question a:

6624 Chief Base Support Plans  
6611 Chief, Logistics Plans Division  
2245Y Chief, Contingency Plans  
Deputy Chief Plans and Resources  
66170 AFLC Mobility Manager  
C6616 Director, Logistics Plans  
1495X Chief Pacific Plans Branch (TACOPS)  
66190 Logistics Plans Superintendent  
6616 Chief, War and Mobility Plans Branch  
0096 Deputy Commander for Resource Management  
T6624 Instructor Supervisor  
T66170 Instructor Logistics Plans Training

Question f:

Aerospace Ground Equipment; Personnel Officers School;  
Logistics Plans and Programs

Logistics Plans and Programs, Contingency War Planning  
Course

Contingency War Planning Course

Air PAX Specialist; Advanced PAX & Cargo; Transportation  
Officer Course

Inventory Management Specialist (64550)

Minuteman Combat Crew Training

Several Flying Training Schools. UPT - KC-135-T-38IP - E-3.  
Contingency Wartime Planning Course.

Aircraft Maintenance Specialist, Logistics Plans Specialist

Navigator Training, Combat Crew Training, Logistics Plans  
Officer Course, Contingency War Planners Course

ACSC, AFIT - LOG 224, LOG 225, LOG 220

Engineering Assistant Course, Construction Management,  
Technical Instructor

Apprentice Logistics Plans Specialist

## TOPIC 2: OPlan Interpretation and BSP Development

Question a:

Time Phased Force Deployment Data (TPFDD), Joint Service  
TPFDD, Annex D's, Wartime Aircraft Activity Report (WAAR),  
Wartime Plans Additive Requirements Report (WPARR), Base  
Case Summary Extract from CONUS Base Summary (Appendix 4),  
Force Module Identification.

Having an accurate estimate of forces planned to deploy,  
employ and/or beddown.

As a MAC planner I look at a base's ability to support an  
airlift flow to/from/through a location. Other aircraft  
beddowns, fuel, MHE, communications, host nation support  
that's available, thrupt capability are all important  
considerations. One important area that often is the long  
pole in the tent is parking for large transport aircraft and  
the proximity to where the MAC people will operate.

To ensure all support activities are at least aware of the  
other support activities and agencies and how these agencies  
will be required to interact together. Some bases are too  
far separated in the plans community to share ideas and  
problem areas - when some of these problems overlap each  
other and each support agency.

Planning for deployment support forces and the activities  
responsibility to receive, beddown, and outload transiting  
forces and noncombatant evacuees. The total force  
capability must be the determining factor when accomplishing  
war planning. Does a complete understanding exist between  
supported commanders and supporting commanders during plan

execution. Specific planning must be accomplished in deployment and reception.

Identification of: base resources, force support requirements, excess or shortfalls in capability. Also, the orderly reception of forces, specific plans for force integration, "communication" or information passing of tasks, and support requirements details to base personnel.

Figuring out what the job is in the worse case scenario. For CONUS bases -what is my job after fighting force deploys? Who uses the base and for what? What assets are available to meet the task? For employment locations - Who's coming and what do they need to get the job done?

There is a triad of critical elements of a good base support plan: Clarity, Availability and Flexibility. Clarity - The base support plan must be understood by all who use it. Be careful with jargon and acronyms they can both help and hinder clarity. Availability - In order to be used, the plan must be available to the troops in the trenches. Flexibility - Since it is impossible to foresee all contingencies - flexibility must be built into the plan to allow for on-scene changes.

Logistics Feasibility Study, Integration of all functional areas to effectively support multiple missions, transition to war in USAFE includes simultaneous support (Phased if everything works), NEO, COB activation, 2E - set up medical sight, movement of malpositioned assets, OPRA (off-base personnel Recovery Area), reception of augmentation forces, mobility - base preparation.

Based on a solid operational concept. Thorough - Tells each function who is going to do what and what resources are available to use. Tells what requirements are valid and where items are coming from to fill those requirements. Must be coordinated (by design).

Ensuring It does not conflict with other plans implemented at or about the same time; mobility plan, OPLAN. That all BSPC members and related agencies make qualified inputs. That it is reviewed regularly (at least annually) to ensure its kept up-to-date.

The reception Portion of the BSP

Question b:

Operations providing pertinent information -- i.e. sortie information and stating their requirements. Acquiring unbound unit information, not much success, units will not answer the mail. Receiving firm planning assumptions from the MAJCOMS. Trying to get functional OPRs to view their jobs from a contingency standpoint. Many functional OPRs, have gotten into a peacetime mode of thought and incorporate peacetime constraints. Teach "Think War".

Obtaining the necessary planning documents, manning the BSPC with the correct people and getting support from commanders and MAJCOM functional managers.

Getting good current data. The deliberate planning cycle is long and one of the last things that happens is the base support plan. Often people are working with 2 year old data that is of questionable value when published. Most base planners are very concerned with real world exercises and ORI preparation and are struggling to keep up with that given their level of training - deliberate planning and BSP take a back seat.

Lack of cooperation and sharing of ideas from the base agencies. Too much parochialism especially at bases with senior leadership homesteaders.

Ensuring that prepositioned material, facilities, procedures and missions are identified and properly allocated to units deploying to support theater commanders. Example, how many units have a complete understanding of what equipment is available, what facilities are assigned etc., when units deploy. Furthermore, I would wonder how much airlift would be wasted not knowing what equipment is in place.

"De-conflicting" asset/support allocation of available resources between supported forces. Accurate and realistic assessments of base capability. Comprehensive and "current" enumeration of total force requirements and taskings. Prioritization of tasking support.

Getting the people involved to adopt a "War Time Attitude". Make them realize that all will not work as advertised. Coordination between agencies - Make sure each agency knows what's available for planning to them. i.e. CE will not have unlimited vehicles to fix housing units.

The most difficult aspect of base support plans is directly related to the most critical elements in the last question;

that is over-classification. If the base support plan is classified it is locked up in a safe -somewhere- and not available to all who need it, verbatim extracts from classified documents do not aid clarity or flexibility.

The time phasing of actions required to transition to war are not correlated to any set timing standard and are sometimes at the discretion of the SR leadership (with respect to what's more important). Getting a plan OPR on the base. Identification of all competing requirements, determining priorities.

Getting functional area POC's organized and fully committed to planning...most see their primary job as flying airplanes, fixing airplanes, or resolving day to day problems. Getting planners to change attitudes from planning based on what if something happens to planning based on when it happens this is how we will do it. Getting all of the supporting command guidance timely and in the correct requirements. We are still plagued by delayed TPFDDs, WCDO's, WPARs, which knows of the extremely long JOPS cycle don't always match beddown and beddover changes.

Determining the wartime mission - OPLAN/TPFDL research. Allocating the resources to carry out the wartime mission - assigning augmentation duties. Convincing base agencies of the relative importance of base support planning.

Planning for the right amount/type of support needed by the forces which plan to arrive at and/or operate from the APOE or POD.

Question c:

All of the above, in addition many of the senior leadership that can relate to a wartime scenario based on personal knowledge and experience are retiring. Perhaps more military history, past logistical problems should be taught. More war gaming in the classroom may shed some light.

I've never seen or heard of anyone providing an "all-service TPFDD." BSPPC members are often lower ranking NCO's who have little to no experience with war plans and are not allowed to make decisions involving their areas. Unless the base is primarily an employment base, most commanders are concerned with "getting out of Dodge" and "getting to the war." During major evaluations, such as ORI's, the base support capability is either not tested, minimally tested or simulated.

We need more involvement from the executioners of the plans into the actual planning stages.

Lack of involvement in wartime logistical matter by commanders. Wartime exercises in theaters concentrate on sortie production. When JCS exercises are conducted, such as WINTEX CIMEX, the logistical community is the only player in these type exercises. Base support planning must be considered as important to commanders as passing ORI's. This is what it will take to produce viable plans.

Inadequate information flow or tasking and force structure. Poor coordination between base "players". Inadequate and/or incomplete training in the planning, analysis and assessment process.

The concept of War is foreign to today's planning force - What is difficult to comprehend is difficult to plan for.

Example: In the Logistics Plans Programs & Mobility Division at Castle AFB, we had a War Support Plan (WPS 440). Each of us had a copy on our desk for daily reference. The classified aspects was published in separate annex and only referred to when needed. The plan was used, questions were answered, and problems were solved on a day to day basis. Since the time, the other plans I've worked with from the ISAFE OPLAN 4409, Keflavik Reception Plan, to How Travis Goes to War have all been classified even though most of the pages are individually unclassified. This limits availability of the plan which brings out a lack of exposure which hinders flexibility, and need I mention clarity is automatically sacrificed - because if its classified it must be absolutely true.

War planning is not a priority. As stated by AF/IG during logistics war support planning FMI: Generally, units w/ airplanes have poor war plans. Units without airplanes have good war plans (i.e. ABG's). Poor training for functional area planners, for most of them it's an additional duty. Guidance on "How to" is not very good.

Lack of training - most functional people are giving too little war planning training. It's learn by doing. As a result they tend to just recopy old plans. Lack of personnel resources committed to planning - base DOX and LGX offices are overtasked and under maned. Other functional areas to planning as an additional duty.

There are very few courses/training classes that even address base support planning. There seems to be very

little WMP-7 information about CONUS base USE planning to support base support planning. Since training and guidance is lacking at the senior levels the problem snowballs.

Support agencies not knowing what they will be required to do or how to perform when and if the plan is put into being. Lack of effective training, poor guidance and apathy are all primary causes.

Question d:

No. Too general, the guidance provided is about the same as AFR 28-3. AFR 28-31 needs to be more specific, and should provide samples of acquired matrixes. These help the very junior planning on writing the plan.

No. It is far too general. Because support planning is very complex and cross-functional, it has to be written so that people who are not full time planners can read and understand. The regulation makes great leaps, first saying that the WMP is the common reference for all Air Force war planning, then says the WMP is not distributed to base level and that MAJCOM's will "pass on pertinent WMP guidance." There is a lot of motherhood and apple pie" guidance, but it doesn't tell a non-full-time planner how to do anything. Statements like, "support for other service units is the responsibility of the service; however, the base should provide support as negotiated or available, "is wishing away" the problem of other services arriving on you base. Soldiers, sailors and Marines eat, sleep and need transportation just like Airmen.

From what little I know about the regulation it is far too vague and is a catch-all that does nothing to help base planners do a good job.

AFR 28-31 does help in that we now have a standard for all to use. Base planning is similar to the way mobility was prior to AFR 28-4; every command was doing their own thing. However the regulation should delineate more in the responsibilities of CONUS bases. For example, the majority of the regulation is written to accommodate overseas commanders.

Yes - it provides a consolidation point for diverse procedures and functional disciplines. It is a good start, but far from a "finished product" or complete Issue. More Attention must be payed (from HQ USAF to base level) to the integration of the "total force" in the planning process and

consideration of the complete joint force requirements in any plan.

AFR 28-31 was not readily available during the initial cut of CBUP or BSP.

No!! These difficulties are not even addressed, however another problem is generated in para 1-51(f) under "review and Initiate Support Agreements" I will discuss both areas: The first difficulty I discussed had to do with the attitude in which the plan was used on a day to day basis. If the plan is written to fill a square required by a regulation, it is a waste of paper, it will not be used on a day to day basis, it will not be referred to in time of war, and will be a source of frustration during peacetime exercises and IG inspections. This condition is subtly encouraged in AFR 28-31. There are mandatory reviews develop this, and determine this and that over and over creating an administrative nightmare - "just tell them what they want to hear and get this plan out of here!" Now notice the paragraph on support agreements. You still have the same review and verify verbiage but look at the last sentence "...monitor, review and ensure the all agreements comply with applicable directives." Just what we need, another regulation telling us to review our agreements! Did you notice the vicious circle here? If you update an agreement, you need to update the plan when you update the plan you need to update the agreement. At the same time, both have their own review cycles. Why the double clutch? As to what needs to be added or changed - try addressing the purpose and objectives of the base support planning process. Let the specifics be handled by the units actually doing the mission. I believe more emphasis needs to be placed on the "how to" rather than the "what to" do in support planning.

AFR 28-31 has not been implemented in USAFE. It wouldn't do to try and answer this question.

The Dec 88 28-31 is a big step forward is identifying in more detail what needs to be considered in a plan. What is missing most now is training and guidance on "how" to plan and put a plan together.

Yes, I believe AFR 28-31 will make a significant difference. However, I'd like to see it supported by an, AFLMC for example, how-to pamphlet. MAJCOM supplements specializing, not just changing, in MAJCOM unique needs should help.

I did not have AFR 28-31 to use as a guide during my last planning job. It had not yet been published.



Question e:

No, I've had prior training in JOPS, WWMCCS, JDS, etc., but for the novice and new person to planning regardless of rank it's a nightmare. Highly recommend 66XXX school provide a 2 week block in the WWMCCS or add to the contingency war planning course. Also add a block that provides thorough training in document interpretation.

Most planning documents are only used on a daily basis by full time planners. There are probably not more than a handful of people on a base who could read a TPFDD, WAA, etc., with any understanding of what they read. This means continuous training/retraining and a time consuming process for BSPP members to accomplish even simple tasks based on planning documents.

MAJCOMS have a wealth of data that should be made available to the bases. For example: in MAC OPlans, MAC provides a section called base activity analysis that show by date the activity at each MAC base. Other MAJCOMS should do likewise. Also, all the airlift data, MOG, fuel, onloads, offloads etc., are published in the MAC OPlan and provided to all the other MAJCOMS. The other MAJCOMS don't always provide that information to their bases.

Yes, because of my newness to this business

I have not had difficulties. However, I possess a lot of experience. Personnel not familiar with logistical matters would have difficulties.

Frequently the documents are contradictory or "out of cycle" w/ one another. WMP "parts" are published and distributed independently of one another. Joint Planning Documents and UMP guidance aren't always provided to the base level planner.

No

The main difficulty I've encountered is in extracting applicable data from the source document. You have to work around special codes, and classified data to get the info you need.

Note: WMP documents are not normally distributed below MAJCOM level. In USAFE one of the problems is that many of the supporting documents are not produced at the same time, i.e. the documents conflict each other. For example: beddown is changed annually but TPFDD is done biannually.

WAA/WPARR/WCDO/VAL/FLAS will all vary as to currency and they are forever in the wake of beddown changes. Interpretation is hindered because of changes which affect other documents used for planning.

Yes - mismatched TPFDDs, DOC statements, and WRM documents are too slow getting to the field of the mission changes

From a training standpoint, the problem seems to be that each command uses different formats for many of the related documents. When you learn for the WMP, TPFDL, etc., in TAC for instance and PCS to USAFE and then try to apply the knowledge, there are inaccurate interpretations, or you have to learn again.

No

Question f:

Total lack of planning knowledge. Have no idea what source documents need to be used and how to use them. Ingrained peacetime mode of thinking. Unit commanders are not knowledgeable in the planning process, fail to provide support and usually view the whole requirement as something they really don't want to do. So an inferior product is produced.

A BSP is usually very complex and non-full-time planners are not trained to use planning documents or to understand the JDA, JOPS, etc., planning process. They have trouble with the "big picture" and the level of interface and interaction necessary at all levels.

Again - parochial thinking - tunnel vision

Determining what is and what is not applicable for development of base support plans.

Lack of specific training, familiarity and experience w/ the planning process. Frequently it's done as "an additional duty" instead of a full-fledged part of the "mission". It is, however, absolutely essential to get (and keep) them involved!

Functional area rep's have to prioritize their work like everyone else. Day to day problems take precedence over planning responsibilities. Coupled with lack of planning experience. There is a typical poor product that comes out in the first draft.

The amount of difficulties vary with the expertise and dedication of the logistics planner who is overseeing the base support plan development. One method is to accept the input from each functional area and put it into the plan unmodified. It works sometimes but depends heavily on the qualification of the functional manager and his ability to communicate in writing, his plans. I feel a better method is to take "advice" from the functional manager, and build a "strawman" plan (which is logistically sound) for everyone to evaluate. Most functional managers are too busy to put their complex activates into a simple plan which is clear, available, and flexible. Many will appreciate the support.

Expertise in planning, knowledge of how each contributes to the support of the mission. Responsiveness to suspenses and putting the plan together again.

Yes - they already have other problems to work so see planning as an additional duty. 99% have no plans training.

Again, from a training standpoint, I would surmise that commanders may not realize the value of BSPs and not worry if they don't send a qualified person to the BSPC. Also, if commanders don't send qualified individuals, that can speak for them, it diminishes quality and slows the planning/coordination process.

Functional "experts" in a lot of cases were not functionally qualified to address the issues that affected their support areas.

Question g:

Verifying the numbers with the TPFDD, format and content IAW the regulation. Personal knowledge of base resources and assets. Reviewing other board minutes, such as facility requirements, funding, etc..

Unless there is a significant deviation from planning document information that the staffing process didn't correct or an experienced planner doesn't catch, there is almost no way of verifying the accuracy of information developed by BSPC members.

In MAC we have all units tasked in an OPlan provide feedback through a system we call the Unit Supportability Estimate - they review their taskings and give the HQ a feel for any problem areas they have supporting the OPlan and why they can't fully support the OPlan. If a base cannot support the

OPlan with the people on hand and augmentation, the HQ needs the feedback to correct the situation.

We have not yet reached this point in the planning stage.

Bean Counting: Comparing forces "claimed" to be support w/ those requiring support. Deconflicting asset & resource allocation.

I have to rely on the integrity of the OPR's and the coordination process to surface problems.

The method I've used is to actually go visit each area where I cannot clearly understand what they are trying to say in their input. This helps me to better understand the operation, and usually express the input more clearly.

Never having been on a BSPC I can't answer. USAFE has local Salty Nation exercises where we practice executing the plan (complete transition to war exercises, included chemical warfare).

Common Sense

Read the information as if I were going to deploy to the base and see if it makes sense. If I don't understand what is being said then I feel the ultimate user will have the same problem.

Question h:

Lack of installation support, Base Support Planning was always a back burner issue, elevating out LIMFACS/Shortfalls with positive results. Setting functional OPRs to comply. Receiving beddown requirement info from the inbound units. Getting transiting unit information from all other services. Who's taking care of NEO. What is the flow and throughput requirements for CRAF and transiting aircraft? The plans are too slow in being updated and not released together too much piece work. Cycles not in sync.

TPFDD's are done by command or service. Base planners don't get all MAJCOM. all services TPFDD's. The WAA is never compatible with the OPLANS and Doesn't provide unit information.

Without the actual planning ever being executed it is difficult to ensure that the planning done for reception or beddown is sufficient to cover all the aspects of support

for forces. In a lot of cases the planning does not always match unit requirements.

Info not provided to base level. Had to specifically request from MAJCOM & then it often was late, out of date, and/or wrong (incorrect or incomplete). Frequently forced to communicate directly w/ joint service counterpart (If Known!) to get info.

I don't deal in "Base Level" planning.

The main problem is to manually extract the data from various classified source documents. A classified annex to the base support plan (published under a separate cover) could help.

Solution: beddown document, joint or all forces TPFDD sorted three ways; origin (mobility), destination (reception), APOD (throughput).

No experience so far.

I'd speculate the problem would be that many don't know there are all forces TPFDD information available. Secondly, if they know, they may not be able to interpret the data accurately.

### TOPIC 3: Training Guide Format

Question a:

Manual with checklist with exercises or games that relate on a computer.

A combination of training methods, aids, and guides need to be used because of the many levels of involvement and expertise necessary, from Public Affairs to Aircraft Maintenance, to Services.

MACOS/XOXP published a standardization guide/training guide that could be used as a guide. All BSP have to go through similar step to develop a BSP - get a group of experts together and develop on that meets everyone's needs.

A combination of training methods should be used. The AFR 28-31 covers a big scope of duties and responsibilities. It does not just cover the planning aspects of logistics plans officers and this should be the theme of training.

Computer w/ accompanying hard copy "lesson guide". Include a generic checklist.

The method I think will be most useful will be a computer program where the unit has the capability, otherwise a do it yourself manual will be the best bet.

Manual and CAI combination. Checklists cause brain deadness and stifle original thinking (attitude is that once you do everything in the checklist you're done, but no checklist is all encompassing).

Combination - a manual checklist and a computer.

A combination checklist and guidance on: selecting the BSPC; getting commander support; and how to interpret TPFDD, WMP, OPLAN, WAA data.

I'm not sure you can present a training guide that will be acceptable to all commands. Each command will have it own methods of BSP planning. Some better than others. If I had to choose one I would have to go with a combination of manual, computer and checklist.

Question b:

Developed lesson plans that require the use of a checklist to find the answers or verify the answers, especially if you have multiple sources. After the academic portion is completed, use the knowledge gained in a computer game or exercise.

See 3a, above

Written as a step-by-step guide an how to do it written for the LCD - the newest guy on the job.

The emphases should be on who and what it takes to develop the base support plan. It is vital that the importance of such plans be established to let all personnel know that this is the plan that units will use to go to war.

Self-paced computer based training w/ hard copy study guide. Could be constructed to lead "student" through construction of his own C/L. Include sample C/L as aide.

If a computer program were used that could walk you through the building of the base support plan by asking a series of questions each filling in the data needed and then printing out the complete plan, quick and relatively painless (If you

have a computer, otherwise get a logistician that can use his brain.

Method should be training style -- lesson plan type; teach people how to go about figuring things out for their location. Tell them what, not how. (Look @ questions found in chapter 28, AFR 28-3).

28-31 provides the basis for this manual/checklist. For this era of computer technology, we ought to be able to develop a menu driven question/answer scheme that would lead a functional planner through the items he needs to cover while at the same time interface items (be sure vehicle requirements is various tasks and annexes are included with transportation portion). Almost 60% of a plan is pretty much canned formatted: By providing answers to a thorough list of questions you could have a software program that could then print most of a plan.

Same as or similar to MCC handbook.

#### OTHER COMMENTS:

I believe of the Air Staff and MAJCOM planners co develop a unified planning cycle and a synchronized release of plans. This will alleviate many of the frustrations for the unit LGX planner. In addition, more emphasis on this process needs to come from above.

AFR 28-31 provides little more than a format. It covers guidance for base support planning in nine pages and puts the responsibility on the MAJCOM's. This is "passing the buck" on a grand scale. Base support is most frequently not a single MAJCOM operation.

As you noticed in my reply the importance of what the base support plan is suggested to accomplish. The plan requires the involvement of commanders at all levels. We must emphasize the importance of this vital planning document and ensure that all aspects of how we intended to go to war are addressed in the plans. This should not be a requirement such as mobility where the deputy commander for resource management has the show. This plan requires the direction from wing commanders or equivalent to make it happen.

Appendix C: Round Two Delphi Survey

12 June 1989

HQ TAC/LGX  
Attn: Major Jones  
Langley AFB, VA 23665-5541

Dear Major Jones:

Thank you for completing the first round of the Delphi Survey on the Base Support Plan. Your comments were of great value to this research.

The second round Delphi is attached. This survey is formatted differently than the first. Instead of you openly responding to the questions, you have an opportunity to state your opinion on your, as well as other respondents, responses. The reason for this is Delphi is concerned with gaining a consensus of opinions. Therefore, your ratings of the responses will be compared with the other respondents ratings, and this data will be used to determine what areas, on average, were agreed upon. Other specifics, about Delphi and this second questionnaire, are contained in the following instruction sheet.

I appreciate the time you are investing in this research. Again, all of your responses have been quite valuable and very informative. Please try to return your completed survey within one week. If you have any questions about this survey or this research, please call me at (513) 878-7781 or AV 785-5435. Thank you again for taking the time to share your expertise.

MARK S. TALLEY, Captain, USAF  
Graduate Student  
Air Force Institute of Technology

2 Atch  
1. Delphi Survey  
2. Return Envelope



TOPIC 2: OPlan Interpretation and BSP Development

Please rank the responses to question (A) from most critical or important elements to least critical or important elements. Using the number 1 as most critical/important through 9, least or less important, and only using each number once. Any response that you feel does not reflect critical or important elements of the base support plan, please indicate with a 0.

A. What do you consider as the most critical or important elements of the base support plan?

A1. \_\_\_\_\_ The planning Documents used to create the Base Support Plan (i.e. Time Phased Force Deployment Data (TPFDD), Joint Service TPFDD, Annex D's, Wartime Aircraft Activity Report (WAAR), etc...).

A2. \_\_\_\_\_ Insuring home base units and employed units are working together when the plan is implemented (Force Integration).

A3. \_\_\_\_\_ Planning for deployment support forces and the activities responsible to receive, beddown, and outload transiting forces.

A4. \_\_\_\_\_ The total force capability must be the determining factor when accomplishing war planning (Worse Case Scenario).

A5. \_\_\_\_\_ Insuring a complete understanding exists between supported commanders and supporting commanders during plan execution (Plan and information crossflow).

A6. \_\_\_\_\_ Identification of shortfalls and limiting factors.

A7. \_\_\_\_\_ Specifics on deployment and/or reception of Noncombatant Evacuation personnel (NEO).

A8. \_\_\_\_\_ Since it is impossible to foresee all contingencies, flexibility must be built into the plan to allow for on-scene changes.

A9. \_\_\_\_\_ Based on a solid operational concept, thorough, tells each function who is going to do what, and what resources are available to use (Clarity).

B. Please indicate your opinion of the following responses to question (B) using the indicated scale shown below, please circle your response:

1	2	3	4	5
Strongly	Disagree	Neither	Agree	Strongly
Disagree		Nor Disagree	Agree	Agree

ORIGINAL QUESTION: What are the most difficult aspects of base support planning (please give examples)?

RESPONSES:

1	2	3	4	5
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B1. Receiving firm planning assumptions and data from the MAJCOMS.

1	2	3	4	5
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B2. Lack of cooperation and sharing of ideas from base agencies.

1	2	3	4	5
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B3. Ensuring that prepositioned material, facilities, procedures and missions are identified and properly allocated to units deploying to support theater commanders.

1	2	3	4	5
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B4. Accurate and realistic assessments of base capability.  
Comprehensive and "current" enumeration of total force requirements and taskings.

1	2	3	4	5
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B5. Getting functional area POC's organized and fully committed to planning.

1	2	3	4	5
---	---	---	---	---

B6. Getting planners to change attitudes from planning based on "what if something happens", to planning based on "when it happens", this is how we will actually execute.

1	2	3	4	5
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B7. Convincing base agencies of the relative importance of base support planning.

Additional comments on question B:

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C. Please indicate your opinion of the following responses to question (C) using the indicated scale shown below, please circle your response:

1	2	3	4	5
Strongly	Disagree	Neither	Agree	Strongly
Disagree		Nor	Disagree	Agree

ORIGINAL QUESTION: What causes the difficulties you identified in question B (i.e. lack of training, poor guidance, difficult to understand, etc..)?

RESPONSES:

1	2	3	4	5
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C1. A large portion of senior leadership, that can relate to a wartime scenario based on personal knowledge and experience, are retiring. Perhaps more military history, past logistical problems should be taught.

1	2	3	4	5
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C2. Lack of involvement in wartime logistical matters by commanders. Wartime exercises in theaters concentrate on sortie production. Base support planning must be considered as important to commanders as passing ORI's.

1	2	3	4	5
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C3. Inadequate information flow or tasking and force structure. Poor coordination between base "players".

1	2	3	4	5
Strongly	Disagree	Neither Agree	Agree	Strongly
Disagree		Nor Disagree		Agree

C4. The base support plan being classified limits availability of the plan which brings out a lack of exposure that hinders flexibility and reduces crossflow of information.

1	2	3	4	5
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C5. Lack of training - most functional people are giving too little war planning training. It's learn by doing. As a result they tend to just recopy old plans.

1	2	3	4	5
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C6. Lack of personnel resources committed to planning - base JOX and LGX offices are overtasked and under manned.

1	2	3	4	5
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C7. Support agencies not knowing what they will be required to do or how to perform when and if the plan is executed.

After reviewing the responses to question C, please indicate any other observations or comments you would like to make:

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D. Please indicate your opinion of the following responses to question (D) using the indicated scale shown below, please circle your response:

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

ORIGINAL QUESTION: Does AFR 28-31 help alleviate these difficulties? If so, how, if not, what should be added or changed to relieve these difficulties?

RESPONSES:

1	2	3	4	5
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D1. No. Too general, the guidance provided is about the same as AFR 28-3. AFR 28-31 needs to be more specific, and should provide samples of acquired matrixes. These help the very junior planner on writing the plan.

1	2	3	4	5
---	---	---	---	---

D2. AFR 28-31 does help in that we now have a standard for all to use.

1	2	3	4	5
---	---	---	---	---

D3. The regulation should delineate more in the responsibilities of CONUS bases. For example, the majority of the regulation is written to accommodate overseas commanders.

1	2	3	4	5
---	---	---	---	---

D4. More Attention must be applied (from HQ USAF to base level) to the integration of the "total force" in the planning process and consideration of the complete joint force requirements in any plan.

1	2	3	4	5
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D5. No!! The regulation should try addressing the purpose and objectives of the base support planning process. Let the specifics be handled by the units actually doing the mission.

1	2	3	4	5
---	---	---	---	---

D6. What is missing most is training and guidance on "how to" plan and put a plan together.

E. After considering the following responses to question (E), please reconsider your own response and provide a new response in the following comment section.

ORIGINAL QUESTION: Have you had any difficulties in interpreting planning documents (i.e. OPlans, WMP, etc..) for use in base support plans? If so, what are these difficulties?

RESPONSES:

No, I've had prior training in JOPS, WWMCCS, JDS, etc..., but for the novice and new person to planning regardless of rank it's a nightmare. Highly recommend 66XXX school provide a 2 week block in the WWMCCS or add to the contingency war planning course. Also add a block that provides thorough training in document interpretation.

I have not had difficulties. However, I possess a lot of experience. Personnel not familiar with logistical matters would have difficulties.

Frequently the documents are contradictory or "out of cycle" w/ one another. WMP "parts" are published and distributed independently of one another. Joint Planning Documents and UMP guidance aren't always provided to the base level planner.

The main difficulty I've encountered is in extracting applicable data from the source document. You have to work around special codes, and classified data to get the info you need.

Yes - mismatched TPFDDs, DOC statements, and WRM documents are too slow getting to the field of the mission changes

From a training standpoint, the problem seems to be that each command uses different formats for many of the related documents. When you learn for the WMP, TPFDL, etc., in TAC for instance and PCS to USAFE and then try to apply the knowledge, there are inaccurate interpretations, or you have to learn again.

Comments on Question (E): \_\_\_\_\_  
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F. Please indicate your opinion of the following responses to question (F) using the indicated scale shown below, please circle your response:

1	2	3	4	5
Strongly	Disagree	Neither Agree	Agree	Strongly
Disagree		Nor Disagree		Agree

ORIGINAL QUESTION: What, if any, are the difficulties in functional area representatives being tasked to develop base support plan annexes?

RESPONSES:

1	2	3	4	5
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F1. Total lack of planning knowledge and experience. Have no idea what source documents need to be used an how to use them.

1	2	3	4	5
---	---	---	---	---

F2. Unit commanders are not knowledgeable in the planning process, fail to provide support and usually view the whole requirement as something they really don't want to do.

1	2	3	4	5
---	---	---	---	---

F3. Frequently it's done as "an additional duty" instead of a full-fledged part of the "mission".

1 2 3 4 5

F4. Functional area representatives have to prioritize their work like everyone else. Day to day problems take precedence over planning responsibilities.

1 2 3 4 5

F5. "Functional experts" in a lot of cases are not truly qualified to address the issues that affected their support areas.

Comments on Question (F): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

G. Please indicate your opinion of the following responses to question (G) using the indicated scale shown below, please circle your response:

1	2	3	4	5
Strongly	Disagree	Neither Agree	Agree	Strongly
Disagree		Nor Disagree		Agree

ORIGINAL QUESTION: What is your method of verifying the accuracy of information developed by BSPC members or others tasked with completing annexes?

RESPONSES:

1 2 3 4 5

G1. Verifying the numbers with the TPFDD, format and content IAW the regulation.

1 2 3 4 5

G2. Personal knowledge of base resources and assets.



1 2 3 4 5

G3. Rely on the integrity of the OPR's and the coordination process to surface problems.

1 2 3 4 5

G4. Visit each area when their inputs are not clearly understood to determine what they are really trying to say in their inputs.

1 2 3 4 5

G5. Read the information as if I were going to deploy to the base and see if it makes sense. If I don't understand what is being said then I feel the ultimate user will have the same problem.

Comments on Question (G): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

H. After considering the responses to question (H) please rephrase your original response or comment on the other responses.

ORIGINAL QUESTION: Discuss the problems you have had, if any, determining what units were tasked to transit or beddown your installation? If you fixed the problems, explain how?

RESPONSES:

Lack of installation support, Base Support Planning was always a back burner issue, elevating out LIMFACS/Shortfalls with positive results. Setting functional OPRs to comply. Receiving beddown requirement information from the inbound units. Getting transiting unit information from all other services. Who's taking care of NEO. What is the flow and throughput requirements for CRAF and transiting aircraft? The plans are too slow in being updated and not released together too much piece work. Cycles not in synchronization.

Without the actual plan ever being executed it is difficult to ensure that the planning done for reception or beddown is sufficient to cover

Information not provided to base level. Had to specifically request from MAJCOM & then it often was late, out of date, and/or wrong (incorrect or incomplete). Frequently forced to communicate directly with joint service counterpart (If Known!) to get information.

I'd speculate the problem would be that many don't know there are all forces TPFDD information available. Secondly, if they know, they may not be able to interpret the data accurately.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page.

TOPIC 3: Training Guide Format

A. Please indicate which response (1,2,3,4 or comment) is your opinion of question A.

ORIGINAL QUESTION: What method should be used to present the training guide (i.e. manual, computer, checklist, combination, etc...) and why?

RESPONSES:

1. ☐ How To Manual
2. ☐ Checklist
3. ☐ Computer Program
4. ☐ Combination of 2 or more of the above (indicate which ones)

Comments or other methods: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. Please indicate your opinion of the following responses to question (B) using the indicated scale shown below, please circle your response:

1	2	3	4	5
Strongly	Disagree	Neither Agree	Agree	Strongly
Disagree		Nor Disagree		Agree

ORIGINAL QUESTION: Explain how the method you indicated in question 3A should be formatted?

RESPONSES:

1                      2                      3                      4                      5

B1. Develop lesson plans that require the use of a checklist to find the answers or verify the answers, especially if you have multiple sources.

1                      2                      3                      4                      5

B2. The emphases should be on who and what it takes to develop the base support plan.

1 2 3 4 5

B3. Self-paced computer based training with hard copy study guide.  
Could be constructed to lead "student" through construction of his own  
computer lessons.

1 2 3 4 5

B4. If a computer program were used that could walk you through the  
building of the base support plan by asking a series of questions each  
filling in the data needed and then printing out the complete plan.

1 2 3 4 5

B5. Same as or similar to Air Force Logistics Management Center  
Mobility Control Center handbook.

Comments on question B: \_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix D: Delphi Round Two Comments

### Topic 2: OPlan Interpretation and BSP Development

#### Question B:

The process of implementing base support planning is met with resistance. Most people feel it's a duplication of effort since plans already exist to cover most wartime areas.

Getting all concerned activities involved in researching supporting documents - WAAR's, TPFDL's, etc.

Firm planning assumptions provide a structure for planning and keeps each level of commanders from "what-ifying" each plan to the point of being "not working" or using different assumptions than the higher level of planners is needed.

The other aspects of availability and flexibility are equally important to clarity. It does no good to have a clearly written plan that is inflexible (can't adjust to the "fog if war") and is not available. If the troops don't know what we want done- they can't do it.

From a supported command's position force allocation, host nation support, currency of documents (same cycle) are crucial. However, most crucial is that many plan to beat the IG not how they would fight.

#### Question C:

When the emphasis is placed on logistics matters, other base agencies get more involved in planning. This causes a better product to be produced. We need the emphasis by commanders to insure that wartime planning is accomplished before the war starts.

Too much emphasis on non-wartime (fill the quare) activities.

Most base level functions are usually cooperative in the planning effort. With little or no war plans training, they will do a good job when the planning documents and MAJCOM guidance is clear.

We must abandon the attitude of being civilians in a funny uniform and realize we are the force to be reckoned with in the next come as you are war.

This was the best set of questions yet.

#### Question E:

There appears to be too many planning documents that tend to overlap or repeat information. AFR 28-31 could be a useful document to

conglomerate this information into one plan that any commander could read and know exactly what is standard/expected. All the commanders should be in agreement with the planning documents. When this "out of cycle" in plans exists it is very difficult to accomplish planning because not everyone is marching to the same tune. For example, it is difficult to plan the beddown an F-4 unit listed in the TPFDD and WAA when the beddown plan has the unit listed as an F-16 unit.

The interpretation of these documents is relatively straight forward. Whether they are related in a significant way to real world conditions and/or situations is doubtful however. Since this at least can be the case, this brings into question the validity of the plan produced with them as a basis.

Worrying that the plan is not right. A lot of other plans are researched and extracted. I'm not sure all of these documents are accurate. These plans are produced on a myriad of different cycles. It's hard to know which plan is more current if there is a conflict.

Planning documents are specifically written to avoid the need for interpretation. The problem of understanding what is in the documents is overcome only by training and reasonable frequent exposure. A UTC is the same in TAC as USAFE. TPFDD's may look a little different to accommodate different user need but the information is all the same.

Portions of each of the preceding responses are correct. Formats provide a problem and then there are so many command interpretations. Also, too many agencies/committees form to make decisions and they are based on making everyone happy or sticking to a budget, not the fact that it will be WAR.

With the exception of the "66" career field, there are no other "full time" planners. Aside from actually prosecuting a conflict, a military force should plan and then prepare for war. Our planning documents have become very fragmented and functionally parochial as non planners fill war planning jobs for a couple of years and then return to their original career area.

The plans are not current. By the time they get to the base the plan are at least two years old. But we are told the plan is important and might be executed. What's worse is all the plans used are not produced at the same time. I agree this mismatching causes a great deal of the problems with base support planning.

I wholeheartedly agree that mismatching, and out of synchronization derived from multitude sources cause severe difficulty in extracting data. This area must be seriously worked before any planning document will make sense.

The members of the base are not trained in planning. But they are supposed to assist me in making a plan. They should receive the same

kind of plans training I do. Then maybe I can relax a little and trust their product.

The biggest difficulty is determining the most current data for planning. The rest of the information is available by reading the source documents and getting some "book learning".

Question F:

Functional area representatives do face the problem of handling too much information (overlapping) and would benefit from a single-source planning document.

F4 - but should not, too much emphasis on peacetime Air Force activities instead of planning to go to war if necessary.

All of the above responses are true. The day to day problems are what commanders and supervisors stress.

The combat logistician will assist the functional managers as much as possible - anything less will result in inadequate plans and a last minute crisis for the logistician to fix anyway.

Question G:

The emphasis must be placed on continuing mission support and integration of effort. This seems to be the most important aspect of base support planning for CONUS bases.

This is the way I would do it since being in training mode I can only speculate.

All of the above responses are true. Unfortunately, experience is often the catalyst which drives which action to take and experience in planning is usually sadly lacking.

The situation in G-5 would encourage me to implement the procedure in G-4.

I always thoroughly check the annexes produced by the representatives. Not personally verifying their products would be foolish. These representatives do not have the planning experience I do. I must insure their product is consistent with the TPFDD and the other annexes.

Question H:

The new WMP 7, all services TPFDD, must be used in the planning for reception or onward movement. Planning for this new document (now the CONUS base USE plan) must be accomplished for CONUS bases. This is the driving factor behind BSP, for stateside units. Our direction now, is

to base the base support plan on the CONUS base USE plan and to insure that all wartime activities are addressed after the war starts.

The heart of the matter is answering the availability, at base level of the joint data needs to accurately and completely plan for force requirements.

It is frustrating to extract from the TPFDD, give this information to a unit representative and get back garbage. This usually causes me to write the annex they were supposed to write. These reps are assigned haphazardly by their commanders. The commanders need to realize how important this plan is. They should be assigning the most senior and experienced persons from the unit.

As a headquarters planner, I realized the difficulty in base level units extracting all the information they need. We developed a computer program to extract all force information required for each base from the current JDS database for all plans and all services. We gave everyone everything they needed.

I'm not certain I know all the units coming to this base. The Air Force units are easy to determine. The guard, reserve and other services are more difficult to obtain. Even when I receive the all service TPFDDs I'm not sure the air staff has all the information necessary.

All the comments seem valid, however in most loggie environments these problems fall behind the day-to-day "civilian management for peak efficiency and cost effectiveness" priorities.

I have the unit representatives develop their own annexes. I have had several training classes for these representatives to teach them how to read the TPFDD extracts and develop the annexes. The classes have worked but take a great deal of my and my staffs time. They should receive training elsewhere. It should not be just my responsibility.

Single base OPR for driving the entire planning effort to produce a single integrated plan. Reception information is available although MAJCOM is slow in providing joint data.

### TOPIC 3: Training Guide Format

#### Question A:

I am weary of a computer training program. This regulation will be classified secret for most units which could cause problems in security. Checklists would be useful because it would depict each units knowledge and tasks to be completed.

A reception plan simulation which will run the plan through a OPlan scenario and evaluate the results, in a real time or compressed time.



Training program with staff planners teaching :how to" lesson plans and seminar.

Question B:

The simulation I mentioned at the beginning of this question would be able to compute the resources loaded by the loggie and bump this against a game plan to see if it will work and allow the loggie to make adjustment as the game progresses.

The absence of planning is the complete integration of all functional areas. This takes experience and a "how would we really do it" attitude. A course with a live instructor is a must. (Running through several what if's would help). The rules are 1) establish the basic principles for planning, 2) tailor for the different missions, 3) each base.

Appendix E: Example Base Support Plan Annexes

ANNEX A -- Task Organization

ANNEX B -- Intelligence

ANNEX C -- Operations

ANNEX D -- Logistics

ANNEX E -- Personnel and Manpower

ANNEX F -- Public Affairs

ANNEX G -- Civil Affairs

ANNEX H -- Environmental Services

ANNEX J -- Command Relationships

ANNEX K -- Command and Control Systems

ANNEX L -- Operations Security

ANNEX M -- Mapping, Charting, and Geodesy

ANNEX N -- Safety

ANNEX P -- Administration

ANNEX Q -- Security

ANNEX R -- Base Reception

ANNEX S -- Engineering and Services

ANNEX T -- Redeployment Plan

ANNEX U -- Contracting

ANNEX V -- War Reserve Material (WRM) Support

ANNEX X -- Execution Checklist

ANNEX Z -- Distribution

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The purpose of this study was to identify and define critical elements involved in base support planning for use in a base support plan training guide. Additionally, a format for this guide was determined. Current issues involved in base support planning were determined through a literature review. These issues were used in the development of a Delphi survey.

A Delphi survey was developed to determine the most critical and important aspects of base support planning, and a format for a base support plan training guide. This Delphi survey was sent to a panel of 15 personnel whose current assignment involved some aspect of base support planning.

This study found the respondents did not have one main method for presenting base support plan training. However, the respondents did agree some formal type of training was needed. They did suggest a training manual as well as computer training program would help train novice base support planners.

The respondents agreed that interpreting source planning documents was critical to base support planning. Issues such as integration of effort, total force capability, flexibility, and force reception, beddown, and transition are the most important aspects of a base support plan. Although the logistics planners usually assemble the plan, this study determined the functional area representatives should be emphasised in a training guide.

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